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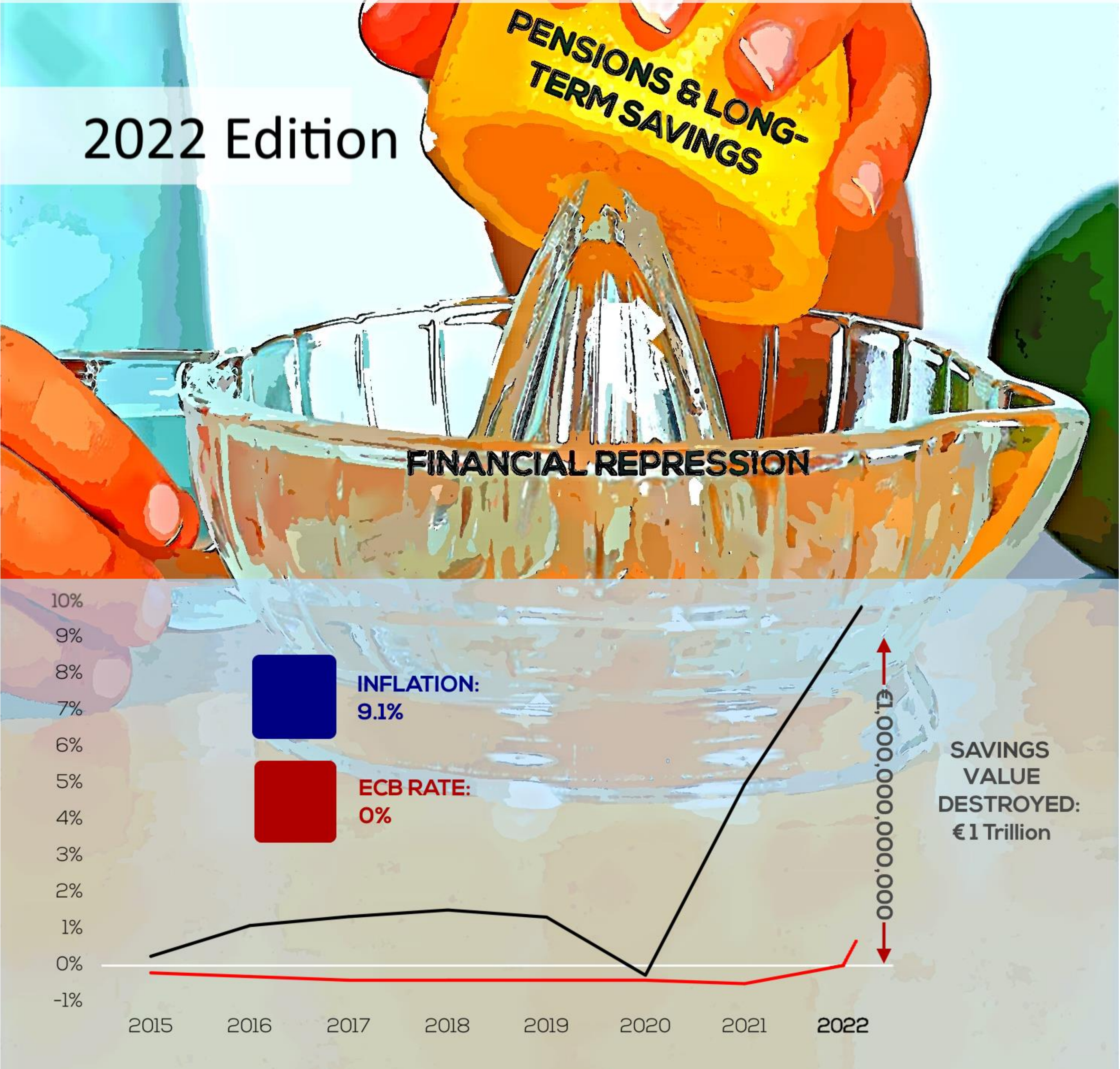
Long-Term & Pension Savings | The Real Return

2022 Edition



Pension Savings: The Real Return

2022 Edition

A Research Report by BETTER FINANCE

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Pension Savings: The Real Return

2022 Edition

Executive Summary

"With the two of three worst financial meltdowns of the past hundred years occurring in the past 12 years, can our societies rely on financial markets to deliver decent retirement outcomes for millions around the world?"[1]

Strong equity returns in 2021 slowed down by inflation, which is here to stay

How much did pension savers earn on average?

In this report, we aim to provide pension comparisons on every front possible. The aggregate summary return tables compare the annual average rates of returns between occupational/collective (Pillar II) pension schemes and between voluntary/individual ones (Pillar III) on 5 periods: 1, 3, 7, 10 years. These standardised periods eliminate inception and market timing biases, allowing to "purely" compare performances between different pension schemes. For information purposes, we also show the average return since data is available (last column).

Aggregate summary return table	Pillar II								
	1 year		3 years		7 years		10 years		max. available*
	2021	2020	2019-2021	2018-2020	2015-2021	2014-2020	2012-2021	2011-2020	
Austria***	3.08%	1.40%	4.12%	1.23%	1.92%	2.35%	2.68%	1.79%	1.56%
Belgium	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Croatia	2.55%	8.06%	3.38%	2.81%	4.76%	4.99%	4.82%	4.10%	3.25%
Denmark	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Estonia	1.30%	7.97%	4.60%	2.10%	1.61%	2.13%	2.35%	1.31%	0.75%
France	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	n.a.	3.53%	n.a.	2.23%	n.a.	2.63%	n.a.	2.46%	2.35%
Italy	1.44%	7.30%	3.96%	1.85%	1.97%	2.81%	3.30%	2.66%	0.86%
Latvia	2.21%	8.43%	4.22%	1.12%	1.15%	1.54%	2.30%	1.45%	0.05%
Lithuania	5.97%	14.92%	8.60%	4.72%	3.95%	4.07%	4.60%	3.52%	1.95%
Netherlands	0.85%	6.23%	6.58%	5.01%	3.84%	5.79%	5.00%	5.26%	2.80%
Poland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Romania	-2,58%	2,59%	1,64%	1,81%	1,23%	2,68%	2,83%	2,95%	2,04%
Slovakia	3.38%	5.37%	3.13%	0.70%	1.59%	1.50%	1.43%	0.79%	0.21%
Spain	1.52%	2.10%	2.25%	2.40%	3.02%	3.86%	2.56%	2.86%	0.86%
Sweden	13.50%	6.45%	17.44%	8.23%	n.a.	n.a.	n.a.	n.a.	10.59%
UK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

*Source: BETTER FINANCE own composition; *whole reporting period differs between countries; **UPF data used as proxy for Pillar II; ***Pension funds used as proxy for Pillar II, 2021 data is estimated; data for Netherlands Pillar II is only occupational pension funds*

[1] Amin Rajan (Crate Research), 'Coronavirus Crisis Inflicts a Double Blow to Pensions' (FT.com, 15 April 2020) available at: https://www.ft.com/content/bd878891-4f20-46c3-ab23-939162a85d9c.

Voluntary pension products vary in market share based on the jurisdiction: in some cases, insurance-based products are more prevalent, whereas in some countries pension funds are preferred. The table below shows the average real net returns for supplementary pensions by standardised holding periods.

Aggregate summary return table	Pillar III								
	1 year		3 years		7 years		10 years		whole reporting period*
	2021	2020	2019-2021	2018-2020	2015-2021	2014-2020	2012-2021	2011-2020	
Austria*	0.44%	1.27%	0.96%	2.65%	1.29%	3.09%	1.50%	3.30%	1.95%
Belgium	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Croatia	2.00%	-1.41%	2.97%	2.13%	3.48%	4.57%	4.41%	3.75%	3.51%
Denmark	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Estonia	6.30%	4.51%	8.14%	2.37%	3.04%	3.19%	4.00%	2.04%	1.78%
France*	0.37%	1.13%	1.55%	0.65%	1.07%	1.43%	1.63%	1.47%	1.47%
Germany**	-3.72%	2.68%	-0.16%	1.30%	0.64%	1.62%	1.11%	1.64%	1.20%
Italy	1.92%	0.03%	3.04%	1.18%	2.18%	2.58%	3.18%	2.49%	1.91%
Latvia	-1.01%	2.14%	3.18%	0.82%	0.59%	1.75%	2.17%	1.58%	1.34%
Lithuania	0.54%	4.83%	4.65%	2.29%	2.17%	2.85%	3.37%	1.98%	1.03%
Netherlands	-2.29%	1.83%	-0.04%	1.39%	1.19%	1.14%	0.33%	0.27%	0.02%
Poland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Romania	-3,07%	0,99%	0,60%	0,35%	0,22%	1,53%	1,90%	1,91%	-1,00%
Slovakia	1.92%	1.30%	3.03%	0.08%	0.92%	1.00%	1.39%	0.44%	0.71%
Spain	2.10%	0.86%	1.58%	1.33%	2.20%	3.08%	2.26%	1.60%	0.35%
Sweden	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
UK	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

*Source: BETTER FINANCE own composition; *whole reporting period differs between countries; ** Riester pension insurances contracts. Acquisition charges are included and spread over 5 years*

Unfortunately, due to unavailability of data breakdowns, for some country cases (UK, Belgium, Denmark, Poland) we were not able to calculate the annual real average returns by Pillar. Nevertheless, the results by retirement provision vehicle are available in Graphs 19 and Table 20 in the *General Report* and on an annual basis (nominal, net and real net return) in each country case).

Note: For a few pension systems analysed in the report, the data available on retirement provision vehicles clearly distinguishes between Pillar II and Pillar III (such as Romania or Slovakia). In other countries, where pension savings products may be used for both Pillars, the categorisation is more difficult since return data is not separated as such. However, for reasons of simplicity and comparability, the authors of the report have put in all the necessary efforts to correctly assign each product according to the pillar it is, or should be, used for.

Pension Savings: The Real Return

2022 Edition

General Report

One can supervise only what one can measure:
Why is this long-term savings performance report (unfortunately) unique?

I. INTRODUCTION

2022 marks the anniversary edition of BETTER FINANCE's Long-Term and Pension Savings Report. For 10 years, BETTER FINANCE aggregated and updated data and information on pension systems' structure, characteristics, charges, tax, and real net returns in a unique publication in this field.

Our report grew from the initial three country cases (Denmark, France, and Spain) covered in the 2013 report ("Private Pensions: The Real Return"[11]) to reach 18 jurisdictions and true long-term reporting horizons: where available, 22 years of gross, net, and real net returns of private occupational and voluntary retirement provision vehicles.

Today, BETTER FINANCE's research on the real returns of long-term and private pension savings comprises:

- this report (full version);
- the summary booklet;
- the *pensions dashboard*, an interactive tool on BETTER FINANCE's website to view and compare returns between private retirement provision vehicles.

1.1. The actual performance of this market is generally unknown to clients and to public supervisors

This report was built to respond to one of the big problems for the pensions market in the EU: lack of comprehensive and comparable data on real net performances. So far, two other publications also aim to provide transparency on the topic, but have a limited scope and are too general to be useful for the average pension saver:

[11] Link for the print version available here: http://www.betterfinance.eu/fileadmin/user_upload/documents/Research_Reports/en/Pension_Study_EN_website.pdf.

Table GR1. Comparison BETTER FINANCE report with EIOPA/OECD		
	EIOPA	OECD
Private pension products	Only insurance-based pension products (unit-linked and profit-participation) based on surveys (68 providers/17 EU Member States/200 products)	Only pension funds (20 EU jurisdictions)
Distinction between pillars (occupational vs voluntary)	No	No
Time horizon	5 years	15 years max.
Data/information on public pension systems	No	Yes
Pension system description (structure, conditions, costs, taxes)	No	Yes
Asset allocation	No	Yes
Gross returns	No	No
Nominal net returns	Yes	Yes
Real net returns	Yes	Yes
Real net returns, after tax	No	No

Source: BETTER FINANCE own research

Our report closes this informational gap for pension savers in 17 EU Member States. This is in line with the European Commission's "Action" to improve the transparency of performance and fees in this area (as part of its Capital Markets Union – CMU - Action Plan) and it corresponds with the current tasks of EIOPA in the area of personal pension products with respect to past performance and costs comparison.[12]

It is the ambition and challenge of this research initiated by BETTER FINANCE and its partners to collect, analyse and report on the actual past performance of **all** long-term and pension savings products.

Reporting the real net return[13] of pension saving products should be:

- the long-term return (at least covering two full economic and stock market cycles, since even long-term returns are very sensitive to entry and exit dates);
- net of all fees, commissions and charges borne directly or indirectly by the customer;

[12] The European Supervisory Authorities (ESAs) have a legal duty to collect, analyse and report data on "consumer trends" in their respective fields (Article 9(1) of the European Regulations establishing the three ESAs).

[13] A limitation of the present report is that it does not take into account real estate as an asset for retirement. The proportion of households owning their residences varies greatly from one country to another. For example, it is especially low in Germany, where a majority of households rent their residences and where home loan and savings contracts have consequently been introduced as the most recent state-subsidised pension savings scheme. For the time being, returns on pension savings are all the more important since a majority of retirees cannot rely on their residential property to ensure a decent minimum standard of life. However, residential property is not necessarily the best asset for retirement: indeed, it is an illiquid asset, and it often does not fit the needs of the elderly in the absence of a broad use of reverse mortgages. The house might become too large or unsuitable in case of dependency. In that case, financial assets might be preferable, on the condition that they provide a good performance.

- net of inflation (since for long-term products only the real return matters; that is the right approach taken by OECD as mentioned above);
- when possible, net of taxes borne by the customer (in the USA it has been mandatory for decades to disclose the past performance of mutual funds after tax in the summary of the prospectus).

Table GR2. BETTER FINANCE report structure and scope	
Structure	1. Executive summary 2. General report (overview of data and findings) 3. Individual country cases (Austria, Belgium, Bulgaria, Croatia, Denmark, Estonia, France, Germany, Italy, Latvia, Lithuania, Poland, the Netherlands, Romania, Slovakia, Spain, Sweden, UK until 2019), representing 87% of EU27 population
Time horizons	22 years (December 1999 – December 2021) or maximum available
Products covered	1. Occupational pension pillar (pension funds, insurance-based pension products, other defined-benefit/contribution vehicles) 2. Voluntary pension pillar (pension funds, insurance-based pension products)
Public pensions	Structure, coverage, funding type, entry/pay-out conditions
Occupational pensions	Architecture (types of products offered), coverage, assets and/or asset allocation, costs, applicable tax regime(s)
Voluntary (individual pensions)	Architecture (types of products offered), coverage, assets and/or asset allocation, costs, applicable tax regime(s)
Returns	1. Gross returns (before costs, tax, and inflation – where available) 2. Nominal net returns (before tax and inflation – where available) 3. Real net returns, before tax, inflation deducted 4. Real net returns, after tax (where available)
Data sources	Publicly available data and information sources

We have chosen a period starting from 31 December 1999 because pension savings returns should be measured over a long-term horizon, and because it includes two market upturns (2003-2006 and 2009-2019) and two downturns (post dot com bubble of 2001-2003 and the 2008 financial crisis).

1.2. Information on the returns of long term and pension savings is deteriorating

This report shows that it is not an impossible, but a very challenging task for an independent expert centre such as BETTER FINANCE to collect the data necessary for this report since quite a lot of data are simply not available at an aggregate and country level, especially for earlier years. The complexity of the taxation of pension savings in EU countries makes it also extremely difficult to compute after tax returns.

Once more, for 2021, we find that information on long-term and pension savings returns is actually not improving but on the contrary deteriorating:

- ***Insufficient information***: for example the Belgian insurance trade organisation Assuralia no longer reports the returns of insurance-regulated « Branch 21 » occupational and personal pension products since 2014, and the national supervisor FSMA does not do it either; in Bulgaria, the necessary data for Professional Pension Funds (pillar II and III) is no longer available since 2018 and the transfers to Pillar I (data from NSSI) are not disclosed; in the UK, the survey conducted by the Department for Statistics has been discontinued and information on British pension funds stopped at 2017;
- ***Late information***: at the time of printing, still a lot of 2021 return data have not been released by the national trade organisations or other providers. OECD has published preliminary data for December 2021, but on a limited number of jurisdictions and only for pension funds; moreover, considering that, in many countries, pension funds are not the most popular vehicle, this constitutes a large information gap.
- ***Unchecked information***: the principal source remains the national trade organisations, their methodology is most often not disclosed, return data do not seem to be checked or audited by any independent party, and sometimes they are only based on sample surveys covering just a portion of the products.

Moreover, savvy retail savers and EU public authorities must rely on private databases (and divergent methodologies) to learn some of the costs and performances of "retail" saving products. This is because the PRIIPs Key Information Document (KID) eliminated pre-contractual disclosure of past performance and actual costs for UCITS and requires return and cost estimations instead for all "retail" investment products, including pension products. This severe setback in transparency and comparability is completely inconsistent with the CMU initiative. Four high-level initiatives have struggled to repair this situation, without success: the NextCMU Report, the High-Level Forum Final Report, the ECON CMU Report and the ESAs' draft RTS on PRIIPs Level 2. BETTER FINANCE continues to deplore the content of the PRIIPs KID.

2. Value for Money: how to achieve pension adequacy?

Public pension authorities typically stress two requisites to achieve "pension adequacy":

a) the need to start saving as early as possible;
b) the need to save a significant portion of one's income before retirement activity income: "*to support a reasonable level of income in retirement, 10% - 15% of an average annual salary needs to be saved*".[14]

BETTER FINANCE continues to disagree: saving earlier and more is not enough. A third and even more important factor is the need to deliver positive and decent long-term **real net** return (i.e., net of inflation and fees). A simple example will illustrate why:

[14] World Economic Forum White Paper: 'We'll live to 100 – How can we afford it?' May 2017

Assuming no inflation and saving 10% of activity income for 30 years,[15] the table below shows that **unless long-term net returns are significantly positive** (in the upper single digits), **saving early and significantly will not provide a decent pension.**

Annual net return	Replacement income
negative 1%	10%
Zero	12%
2%	17%
8%	49%

Moreover, in light of the special analysis undertaken in this report on *financial repression*, savers must also be aware and take into account the effects of ***inflation***, particularly since currently it reaches historical records.

What is pension adequacy?

This question ultimately revolves around the level of retirement income (pension) compared to the pre-retirement income. The EU defines *pension adequacy* indirectly through three objectives that a pension system should achieve:

1) **income replacement**: ensure a minimum standard of living at retirement,
2) **sustainability**: ensure that the public pension system is sustainable; and
3) **transparency**: inform workers about the need to plan for their retirement.[16]

On income replacement, the EU's Open Method of Coordination on Social Protection and Social Inclusion[17] further specifies that pensions should:

- *in general*, be at a certain level so that the standards of living pre-retirement are maintained, to "*the greatest possible extent*", after retirement;
- *for special cases*, ensure a minimum standard of living at retirement so as to avoid pension poverty.

To measure the two above objectives, two indicators are generally used: the *aggregate replacement ratio*,[18] showing how big the gross pension is compared to the salary, and the

[15] As recommended by Public Authorities assuming 25-year life expectancy at retirement, gross of fees and taxes.

[16] Directorate-General for Employment, Social Affairs and Inclusion of the European Commission and the Social Protection Committee, *Pension Adequacy in the European Union 2010-2050* (May 2021) European Commission, available at: file:///C:/Users/Stefan/Downloads/pension%20adequacy%20in%20the%20european%20union%202010-2050-KE3012757ENN.pdf.

[17] See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - "*A renewed commitment to social Europe: Reinforcing the Open Method of Coordination for Social Protection and Social Inclusion*" {SEC(2008) 2153} {SEC(2008) 2169} {SEC(2008) 2170} {SEC(2008) 2179}, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52008DC0418.

[18] According to Eurostat, the *aggregate replacement ratio* is the ratio of the median individual gross pensions of 65-74 age category relative to median individual gross earnings of 50-59 age category, excluding other social benefits.

theoretical replacement rate, showing the instant change (drop/increase) in income when retiring from active life:

$$Aggregate\ replacement\ ratio = \frac{gross\ median\ pension\ (pop.aged\ 65-74\ yo)}{gross\ median\ income\ (pop.aged\ 50-59\ yo)}$$

$$Theoretical\ replacement\ ratio = \frac{pension\ in\ the\ first\ year\ of\ retirement}{income\ in\ the\ last\ year\ of\ work}$$

The International Labour Organisation obliges parties to the Treaty to guarantee a minimum 40% of the previous earnings (prior to retirement) after 30 years of contributions;[19] the same threshold is used by the European Code of Social Security.[20] However, an actual threshold for pension adequacy was never agreed, although EU Member States agree on its objectives (to prevent old-age poverty, to replace income at a rate to *maintain* the standard of living, to be sustainable).

The reality is that pension adequacy[21] comprises two additional components, besides the actual *pension vs salary* ratio:

- the time spent to earn the pension vs the time spent receiving it;
- the amount of contributions to pension provision, namely mandatory (State) schemes and voluntary (occupational/individual) ones; put simply, *pension savings*.

To achieve *pension adequacy*, retirement benefits altogether (State and private pensions) should amount to at least 70%-80% of late working life gross salary.

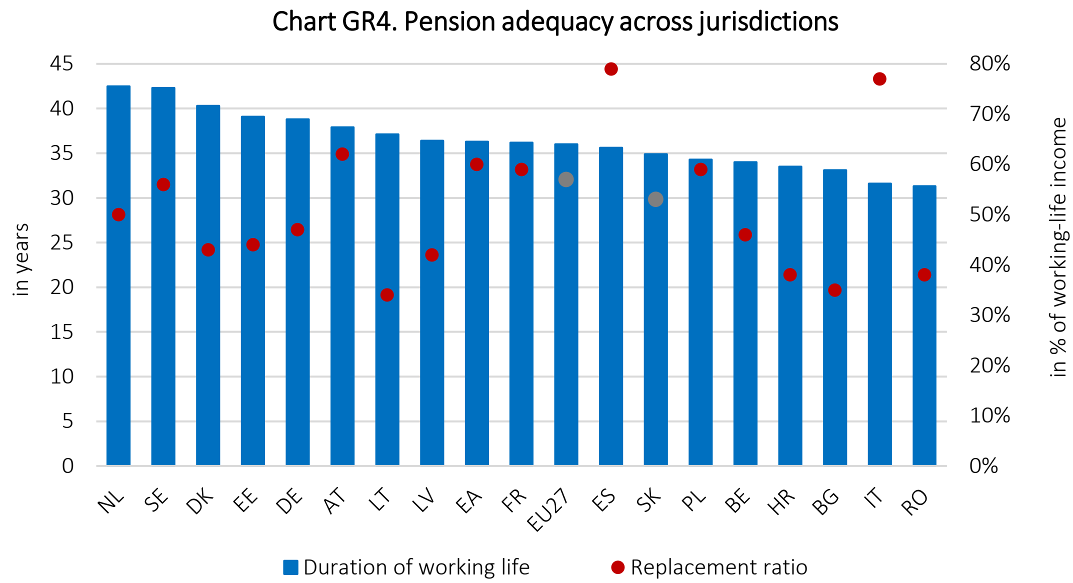
Currently, the aggregate replacement rate (mostly State pension) is very low across the countries in scope of our report: fourteen out of seventeen jurisdictions provide a replacement rate lower than 60% for over more than 30 years of working life.

The indicator is based on the EU-SILC (statistics on income, social inclusion and living conditions) – See Eurostat, *Aggregate Replacement Ratio for Pensions (excluding other social benefits) by sex*, available at: https://ec.europa.eu/eurostat/databrowser/view/tespn070/default/table?lang=en.

[19] Art. 67 of Convention C102 on Social Security (Minimum Standards) of the International Labour Organisation, available at: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C102; Art. 29 of the later adopted Convention C128 on Invalidity, Old-Age and Survivors' Benefits Convention of the International Labour Organisation (available here: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:55:0::NO::P55_TYPE,P55_LANG,P55_DOCUMENT,P55_NODE:CON,en,C128,/Document) required a higher threshold, i.e. 45%.

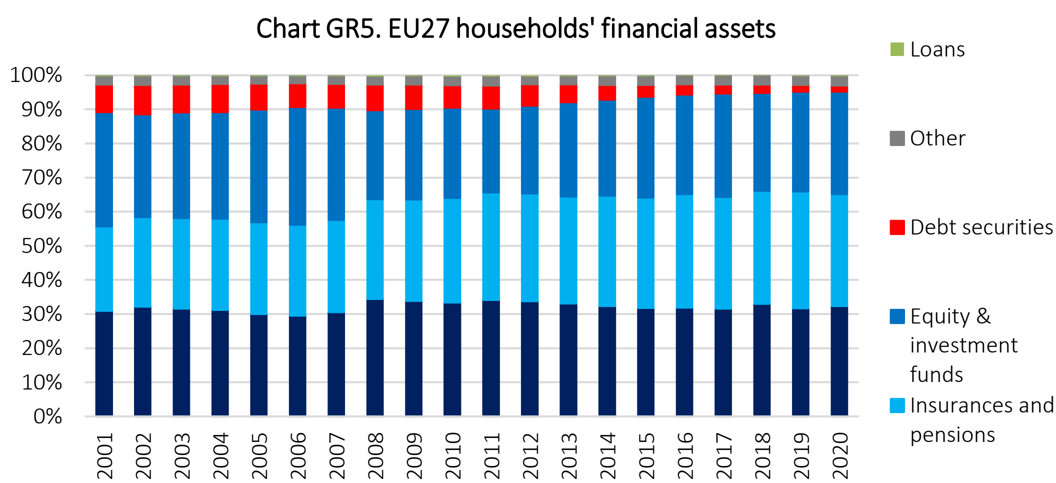
[20] Art. 67, Schedule to Part XI, of the European Code of Social Security, available at: https://rm.coe.int/168006b65e.

[21] Here we take only the financial point of view, but there are several other factors (non-financial) that contribute to "*maintaining the standard of life at retirement*", such as home ownership, sources of income, employment opportunities and access to non-financial benefits – see European Commission, *European Semester Thematic Factsheet: Adequacy and Sustainability of Pensions* (2017) European Commission, p. 3, available at: https://ec.europa.eu/info/sites/default/files/file_import/european-semester_thematic-factsheet_adequacy-sustainability-pensions_en_0.pdf.



Source: own composition based on Eurostar data; *EU27 replacement ratio corresponds to 2019; Slovakia replacement ratio corresponds to 2020

There has been a shift from the full reliance on the public scheme of redistribution (tax-funded defined-benefit) to a more capital markets reliant system, where the main pension income stream should come from private pension products. Pension performances are subject to inflation and to tax, which eat into the retirement pot.



Source: BETTER FINANCE based on Eurostat data

Our findings clearly confirm that capital market performances have unfortunately very little to do with the performances of the actual savings products distributed to EU citizens. This is particularly true for long-term and pension savings. The main reason is the fact that most EU citizens do not invest the majority of their savings directly into capital market products (such as equities and bonds), but into "packaged products" (such as investment funds, life insurance contracts and pension products).

3. Performance: capital markets are not a proxy for retail investments

One could then argue that insurance and pension products have similar returns to a mixed portfolio of equities and bonds, since those are indeed the main underlying investment components of insurance and pension "packaged" products. However, this is not true as the share of packaged products and debt instruments are dominant in most pension portfolios. Realities such as fees and commissions, portfolio turnover rates, manager's risks, etc., invalidate this approach.

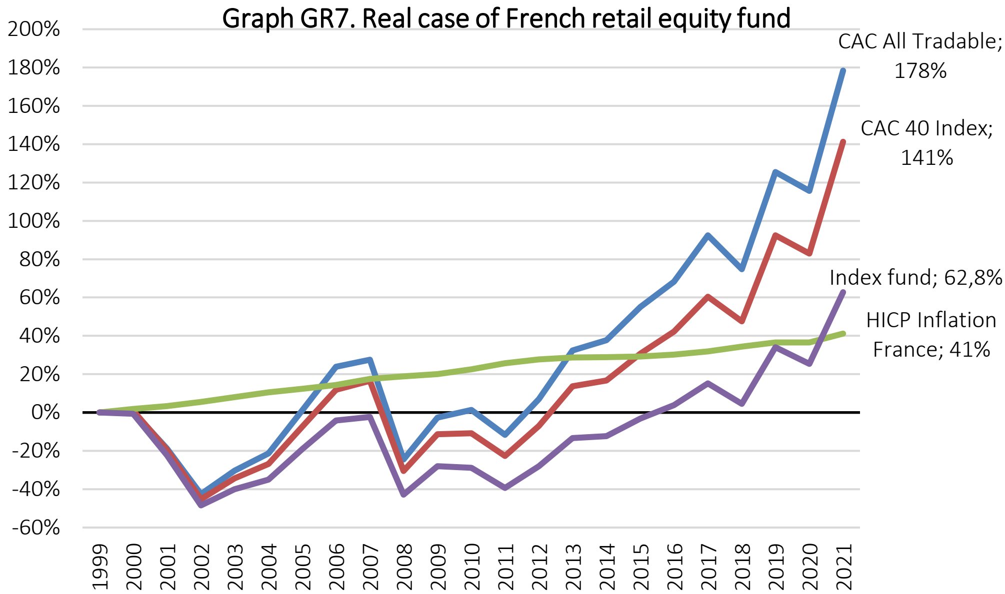
Table GR3 and Graph GR4 below show two striking – but unfortunately not uncommon – real examples of this largely ignored reality: capital market performance is not a valid proxy for retail investment performance and the main reasons for this are the fees and commissions charged directly or indirectly to retail customers. The European Commission itself publicly stressed this fact (see footnote 2 above).

Table GR6. Real case of a Belgian life insurance (branch 23)

Capital markets vs. Belgian individual pension insurance 2000-2021 performance	
Capital markets (benchmark index*) performance	
Nominal performance	288%
Real performance (before tax)	183%
Pension insurance performance (same benchmark)	
Nominal performance	182%
Real performance (before tax)	116%

*Source: Sources: BETTER FINANCE own computations based on Morningstar public website; *Benchmark is composed of 50% bonds (LP06TREU) and 50% STOXX All Europe Total Market Return*

The real case above illustrates a unit-linked life insurance product (Pillar III in Belgium). The pension product's nominal return amounted to less than two thirds of its corresponding capital market benchmark's return.



<u>Source</u>: Own elaboration based on Graph FR3 in the French chapter

The real case above illustrates an investment fund domiciled in France, a so-called retail CAC 40 "index" fund.[22] The fund actually underperformed the relevant equity index by 78.5 p.p. after 22 years of existence (1.85% per year), with the performance gap fully attributable to fees. The fund has also massively destroyed the real value of its clients' savings, as inflation has been almost twice as high as its nominal performance. It is quite surprising that with such a huge return gap vis-à-vis its benchmark, this fund is still allowed to portray itself as an "index-tracking" one, and that no warning is to be found on the Key Information Document (KIID) of the fund.

4. European Pension returns outlook

Our research findings show that most long-term and pension savings products did not, on average, overperform a broad capital markets index (balanced 50% equity – 50% bond), and in one too many cases even destroying the real value for European pension savers (i.e., provided a negative return after inflation). Based on our calculations and available data, 37 out of the 41 retirement provision vehicles analysed underperformed European capital markets by an average 1.93% per year. Moreover, three out of these 37 even delivered real negative performances over long-term periods (between 15 and 22 years).

At the time of writing, the overall mid-term outlook for the adequacy of European pension savings is worrying when one analyses it for each of these main return drivers:

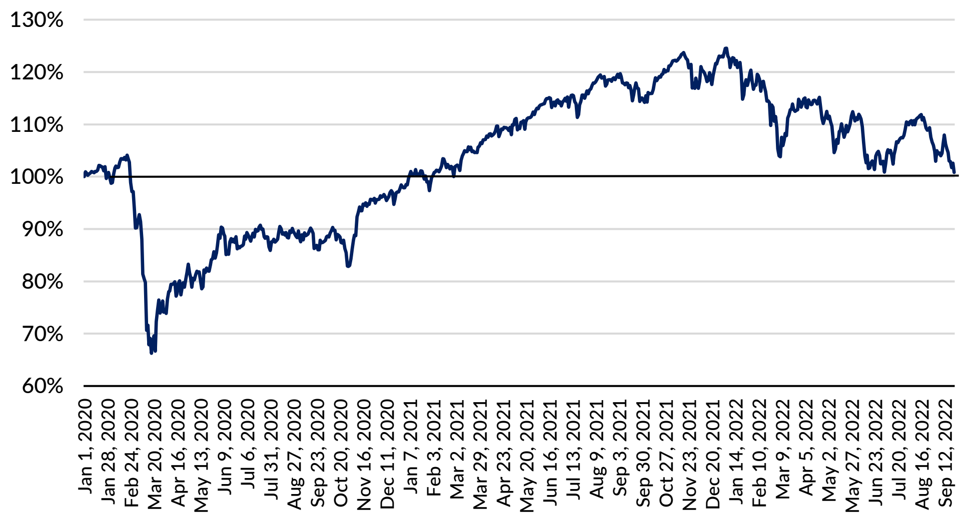
a) it is unlikely that the European bond markets will come any closer to the extraordinary returns of the period ended in 2020 for bonds due to the continuous

[22] Wrapped in an insurance contract as suggested by the distributor.

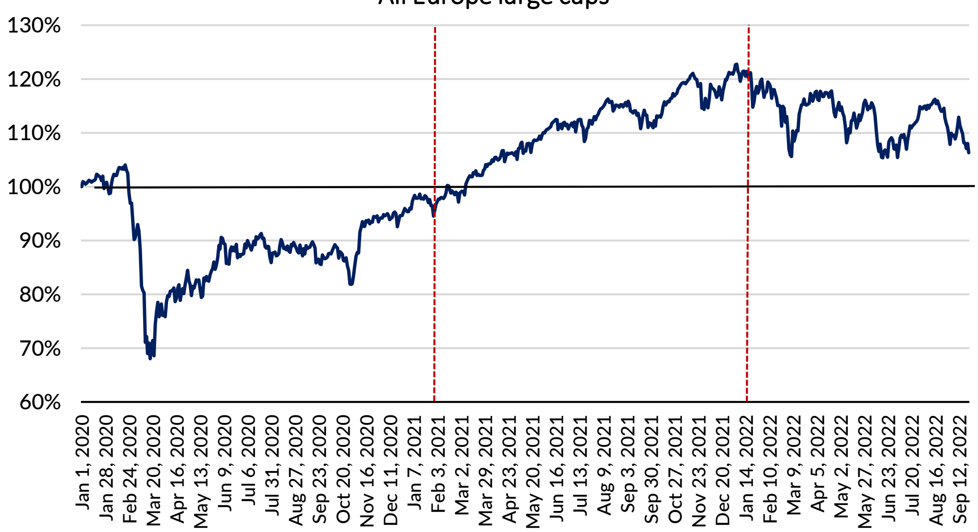
fall of interest rates, currently at rock-bottom levels; moreover, the reversal of quantitative easing programmes of Eurozone central banks will further affect the returns on sovereign bonds; the negative impact of this foreseeable trend in bond returns on pensions' returns will be reinforced by a higher proportion of bonds in pension products' portfolios in recent years; this is all the more relevant due to monetary policy response to the health-generated recession;

b) the strong growth of equities in 2020 and 2021 is already reverting, with the European all country broad equity index reaching pre-2020 levels and the large caps market also close by;

All Europe broad market



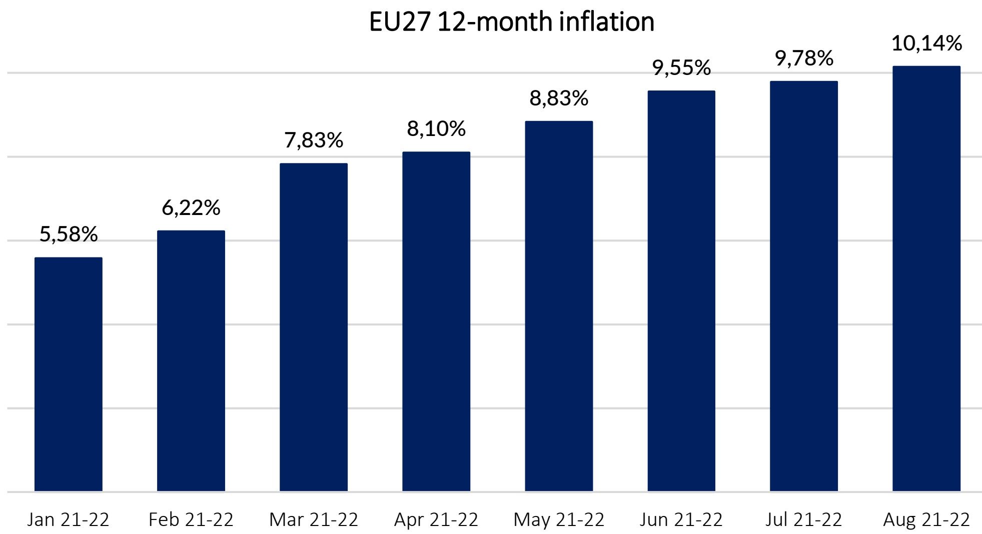
All Europe large caps

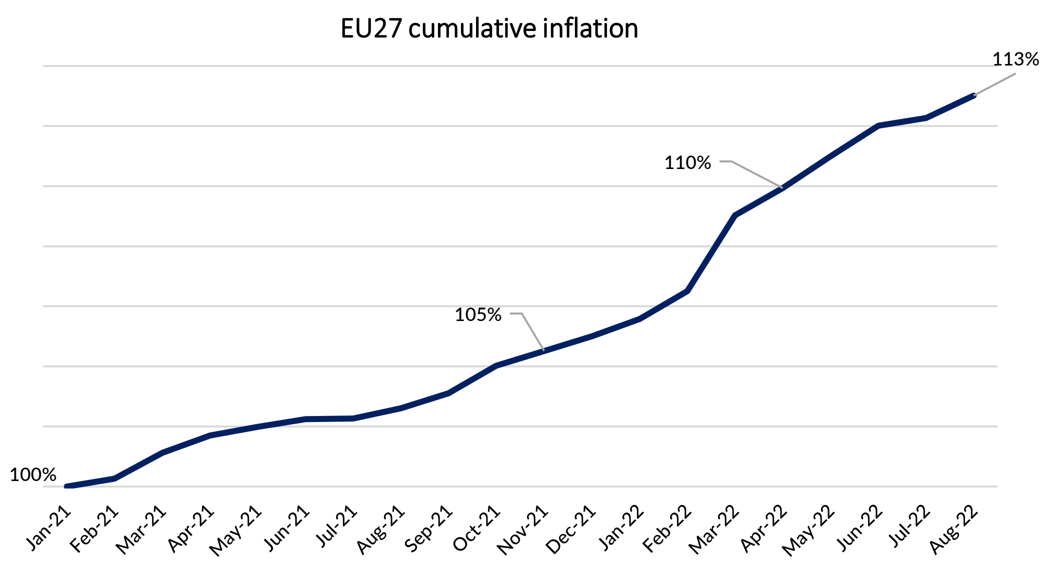


Source: Own composition based on MSCI data

c) costs and charges, as far as our data indicates, are not significantly improving;

d) inflation already took a heavy toll on pension returns in 2021 and it will be much, much stronger in 2022 due to record rates;





Source: Own composition based on Eurostat data

e) Taxes on long-term and pension savings do not show any significant downward trend either.

Pension Savings: The Real Return

2022 Edition

Country Case: Romania

Rezumat

Ţinând cont de proporţiile reduse de acoperire a forţei de muncă în sistemele de pensii private din Europa, România se distinge prin obligativitatea aderării la fondurile de pensii administrate privat. Această prevedere constituie, în principiu, un avantaj atât pentru individ, cât şi pentru sistemul public de pensii, reducând presiunea pe cel din urmă si crescând şansele de a genera un nivel adecvat al venitului după pensionare.

Concluziile Înaltului Forum privind Uniunea Pieţelor de Capital (High-Level Forum on the Capital Markets Union, 2020) subliniază necesitatea armonizării, la nivelul Uniunii Europene, a prevederilor privind aderarea automată, cu posibilitatea de retragere, a întregii forţe de muncă ocupate. În acest sens, Romania se află pe traiectoria potrivită pentru consolidarea unui sistem de pensii durabil. Mai mult, fondurile de pensii din pilonul II cad sub incidenţa unei obligaţii de a obţine un randament minim. Din nefericire, acest randament minim este calculat în termeni nominali, nu reali, ceea ce în perioade cu rate foarte înalte ale inflației, cum este și cea din prezent, pot afecta foarte serios participanții în sistemele de pensii administrate privat.

Fondurile de pensii din România au înregistrat randamente nominale nete pozitive in ultimii 15 ani: media anuala pentru pilonul II a fost de 5.38% (calculat in €, cumulat 208%) iar pentru pilonul III 2.63% (calculat in €, cumulat 147%). Însă, după ajustarea la nivelul inflaţiei, fondurile pensii administrate privat au obţinut, în medie, 2.04% (calculat în €, cumulat 132%) iar fondurile facultative -1% (calculat în €, cumulat -14%). Trebuie totuși menționat că aceste rezultate nete pozitive au fost influențate favorabil de faptul că, în momentul crizei financiare din 2008, fondurile de pensii din România erau la început, astfel încât corecțiile majore ale piețelor le-au afectat într-o foarte mică măsură.

Compunerea portofoliilor ambelor tipuri de scheme administrate privat rămâne foarte similară şi, prin urmare, generează randamente brute similare. Cu toate acestea, randamentul net al Pilonului III este influenţat în mod semnificativ de structura costurilor substanţial mai mari (aproape de 4 ori mai mari) şi, astfel, pe termen lung, va genera randamente mai mici decât cele aferente Pilonului II.

Asociaţia Utilizatorilor Români de Servicii Financiare (AURSF), membră BETTER FINANCE, a atras în permanenţă atenţia asupra costurilor mari de administrare și, în special asupra comisionării ex-ante a contribuțiilor virate în conturile participanților. În plus, AURSF a criticat vehement și a contestat, inclusiv în Parlament, decizia autorităţilor de a reduce contribuţiile

virate în contul participanţilor de la 5,1% la 3,75%, care a reprezentat o deturnare inabil mascată a 0,5% din venitul brut al acestora dinspre contul personal de la pilonul II către pilonul I. De asemenea, AURSF a inițiat schimbarea legislativă prin care s-a încurajat opţiunea asumată a participanţilor pentru unul dintre fondurile administrate privat, urmând să monitorizeze dacă obligativitatea de informare impusa angajatorilor începând cu data de 19 iulie 2021 va produce efectele scontate, în sensul diminuării numărului de participanți distribuiți aleatoriu. De asemenea, AURSF a pus în discuție în cadrul Grupului de Dialog Permanent pentru Protecția Consumatorilor organizat la nivelul Autorității de Supraveghere Financiară (ASF) problema afectării grave a randamentelor obținute de fondurile de pensii adminístrate privat, în contextul creșterii ratei inflației și a ratelor de dobânzi, care au afectat negativ randamentele titlurilor de stat, principalul activ deținut de fondurile de pensii adminístrate privat. În plus, AURSF a solicitat explicații și în legatură cu achiziționarea de către fondurile de pensii adminístrate privat a unor obligațiuni ale unei bănci cu capital rusesc.

Eforturile Autorităţii de Supraveghere Financiară (ASF) privind transparenţa vehiculelor de pensii private aflate sub jurisdicţia sa merită o menţiune specială. Coordonatorii acestui raport subliniază că, în general, obţinerea datelor statistice necesare analizelor noastre devine din ce în ce mai grea: randamentele (dacă) sunt publicate cu multă întârziere şi după deducerea costurilor (ceea ce face dificilă raportarea randamentelor brute), iar alte cifre cheie (număr de participanţi, alocarea capitalului, valoarea activelor sub gestiune) sunt fie indisponibile, fie extrase din surse variate.

În schimb, exact cum recomandăm şi altor autorităţi competente, pagina de internet "Date statistice fonduri de pensii" întreţinută de A.S.F. România actualizează, lunar, 89 de tabele privind fondurile de pensii din pilonul II şi pilonul III.

Felicităm A.S.F. România pentru acest demers şi recomandăm ferm completarea tabelelor 5.1 si 4.1 cu randamentele nete ajustate cu indicele inflaţiei (indicele lunar armonizat al preţurilor de consum, publicat de Eurostat).

Summary

Considering the reduced coverage ratios of the occupied labour force in European private pension schemes, Romania stands out for its mandatory enrolment to privately managed pension funds (Pillar II, occupational). This provision gives an advantage both for the individual and for the public pension system as it reduces pressure on the latter and elevates the chances to achieve pension adequacy.

The High-Level Forum on the Capital Markets Union (2020) concluded the need to harmonise, at EU level, regulations on auto-enrolment, with the choice of withdrawal, of the entire occupied labour force. In this regard, Romania is on the right path to consolidate a sustainable pension system. Moreover, occupational pension funds are required to deliver a minimum return. Unfortunately, this return is calculated in nominal, not real terms, which can significantly affect privately managed pension fund participants in times of spiralling inflation, as is currently the case.

Romanian pension funds reported positive nominal returns over the past 15 years: the annual average for Pillar II was 5.38% (computed in €, compounded 208%) and for Pillar III 2.63% (computed in €, compounded 147%). However, after adjusting for inflation, privately managed funds returned, on average, 2.04% (computed in €, compounded 132%) and voluntary funds -1% (computed in €, compounded -14%). It is worth mentioning that these performances were positively influence by the fact that, during the 2008 global crisis, the funds were at its inception, thus the impact of market corrections was minimal.

The portfolios of both schemes are very similar and, thus, generate similar gross returns. However, Pillar III returns are heavily influenced by the significantly higher costs (almost four times higher) and, as such, on the long-term it will generate lower returns than Pillar II funds.

The Romanian Financial Services Users' Association (AURSF), member of BETTER FINANCE, has constantly drawn attention to the high administrative costs and, in particular, to applying ex-ante commissions on pension fund participants' contributions to their individual accounts. Moreover, AURSF has firmly criticized, including before the Romanian Parliament, public authorities' decision to reduce the contribution rate from 5.1% to 3.75%, which represented an unsuccessfully masked misappropriation of their gross income from the personal account to Pillar I. In addition, AURSF initiated the legislative reform incentivizing the active choice of participants for one of the privately managed pension funds, which will be subject to monitoring if employers' duty to inform as of 19 July 2021 will reach the aim of reducing the number of default assigned participants. AURSF also tabled the issue of pension funds' performances in times of rising inflation and interest rates, which affected the yield of sovereign instruments, the main asset in pension funds' portfolios. Last, AURSF demanded justifications as to the acquisition of bonds issued by a Russian-capital bank.

The Romanian Financial Supervisory Authority's efforts towards the transparency of private pension vehicles under its jurisdiction deserve a special mention. This report's coordinators highlight that, in general, it's becoming more and more difficult to obtain the necessary statistical data for our analyses: (where applicable) returns are published late and after deducting costs and charges (making it difficult to compute gross returns), and other key figures (number of participants, asset allocation, assets under management) are either unavailable, or aggregated from other various sources.

In contrast, as we have been recommending to other competent authorities as well, the webpage "Date statistice fonduri de pensii" (available only in Romanian) updates, on a monthly basis, 89 tables on Pillar II and Pillar III pension funds.

We congratulate the Romanian FSA for this endeavour and firmly recommend adding to tables 5.1 and 4.1 inflation-adjusted net returns (using the monthly harmonised index of consumer prices, published by Eurostat).

Introduction

The Romanian old-age pension system is based on the World Bank's multi-pillar model, which consists of three main pillars:

- Pillar I – State pension organized as a mandatory Pay-As-You-Go (PAYG) scheme;
- Pillar II – Organised as a mandatory, funded and defined contribution pension scheme,
- Pillar III – A supplementary pension scheme, based on the principle of voluntary participation with the defined-contribution characteristic.

Romania's multi-pillar pension reform began in 2007, when Pillar III was added into the pension system (collecting the first contributions) and became voluntary for all persons earning any type of income. Pillar II was put into place in 2008 (collecting the first contributions) and became mandatory for all employees aged under 35.

Table RO1. Pensions system in Romania		
National Public Pensions Office	Private Pension System Supervisory Commission	
PILLAR I	**PILLAR II**	**PILLAR III**
State Pension	**Funded pension**	**Voluntary pension**
Law no. 263/2010 on the unitary public pension system	Law no. 411/2004 on the privately managed pension funds, republished, including subsequent amendments and additions	Law no.204/2006 on the voluntary pensions, including subsequent amendments and additions
Mandatory	Mandatory	Voluntary
Publicly managed	Privately managed pension funds	
PAYG	Funded	
DB (Defined Benefit scheme)	DC (Defined Contribution scheme)	
	Individual personal pension accounts	
The possibility of early and partially early retirement, contingent upon the fulfilment of the age conditions and the contribution stage provided by the law and the accumulated points.	Withdrawal from the system is only allowed through retirement.	The participant can, at any time, suspend or stop the contribution payment (they remain members in the system until retirement).
Quick facts		
Number of old-age pensioners: 5.08 mil.	Administrators: 7	Administrators: 8
Number of insured: 6.23 mil.	Funds: 7	Funds: 10

Average old-age pension: €336.6	Custodians: 3	Custodians: 3
Average salary (gross): €1278.4	Brokers: 14	Brokers: 21
Net replacement ratio (state pension): 26.3%	AuM: €18 bln. (89.1 bln. RON)	AuM: €0.69 bln. (3.41 bln RON)
	Participants: 7.79 mil.	Participants: 0.56 mil.
Average aggregate pension replacement ratio: 38% (2021 – Eurostat)		

Source: Own elaboration based on CNPP, ASF and INSSE data, 2022; Notes: Exchange rate RON/EUR = 4.949; data on average old-age pension and gross salary and data on the number of old-age pensioner are calculated as an average for the year 2021; data on number of participants and assets under management as of December 2021

The overall coverage of Pillar II, measured as a ratio between the number of participants and the economically active population, was almost entire working population in 2019, while Pillar III covered only 6% of the economically active population. Thus, we can expect than future pension income stream will be influenced mostly by Pillar II pensions, while Pillar III will generate an insignificant part of individuals income during retirement.

Summary Return Table

	Pillar II		Pillar III	
Holding Period	Nominal	Real	Nominal	Real
1 year	4.12%	-2.58%	3.63%	-3.07%
3 years	5.84%	1.64%	4.80%	0.6%
7 years	3.73%	1.23%	2.71%	0.22%
10 years	5.28%	2.83%	4.35%	1.90%
Since inception	5.38%	1.91%	2.63%	-1.00%

Source: BETTER FINANCE own composition, 2022

Pillar I – State Pensions

The first pillar of the Romanian pension system is organized on the Pay-as-You-Go (PAYG) principle of redistribution, being funded on an ongoing basis and functioning on the defined-benefit rule.

The state (through the National House of Public Pensions, a public institution constituted for this purpose in particular[217]) collects the social pension contribution from the contributors[218] and immediately pays the pensions to the current retirees.[219] State pension in Romania is also based on the principle of solidarity between generations and gives the right to pension entitlement upon retirement age, following a minimum contribution period (15 years), as provided by law.

This compulsory system is closely connected to the economic activity and income of citizens. It is 88%[220] financed from social security contributions made by both employers and by employees, while generally consuming the biggest part (or entirety) of the social security budget.

Social security contributions are paid to the State's social security budget at a rate of 20.8% of payroll for employers and 10.5% of income (gross earnings) for employees. It should be noted that since 1 October 2014, the employer's contribution ratio has been reduced to 15.8%. This pillar is financed by contributions of economically active individuals. These contributions are directed to the CNPP, which distributes the benefit to current pensioners (system beneficiaries).

The pensions are calculated using a formula to an algorithm based on the mean salary score (which is calculated by comparing an individual's own salary to the average monthly salary), the correction coefficient, the full vesting period (35 years), and on pension points, which are expressed as a nominal value.

Therefore, the pension entitlement is calculated when the employee claims it and uses the values determined for that date (once), using the following formula:

Pension allowance =

Mean Salary Score x Correction Coefficient x Value of the Pension Point.

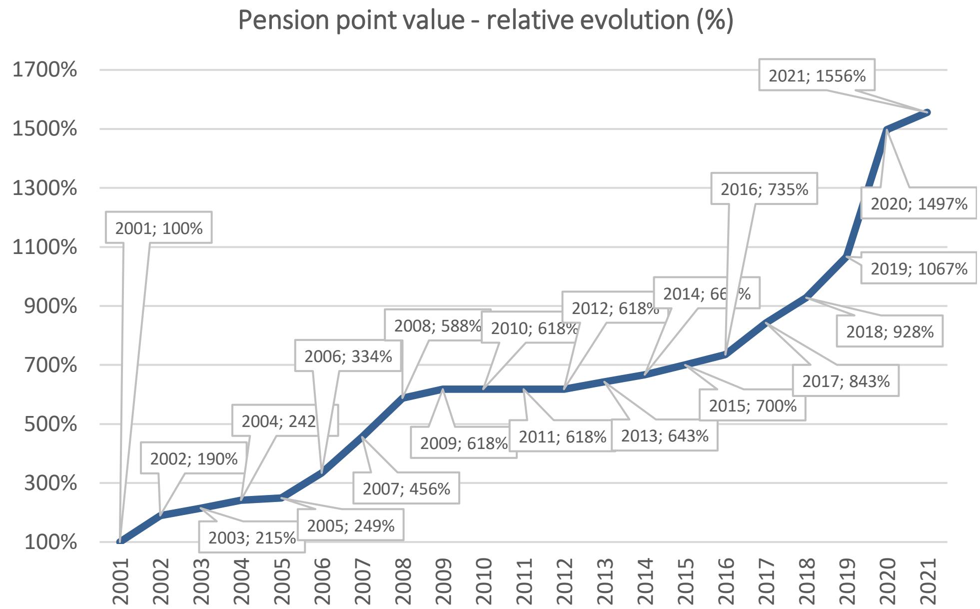
The most important variable is given by the value of the pension point, which have been increasing for 20 years in a row.

[217] In Romanian, „Casa Naţională de Pensii Publice", hereinafter CNPP, as per Article 4.2 read in conjunction with Article 52 (Chapter IV, Section I) of Law no. 263/2010: http://legislatie.just.ro/Public/DetaliiDocument/124530.

[218] According to the principle of contributivity, as per Article 2.c) of Law no. 263/2010.

[219] According to the principle of redistribution provided in Article 2.e) of Law no. 263/2010.

[220] In 2017, 75% of the budget was constituted from social security contributions and 25% from the consolidated state budget – see Annex no. 1/03 to Law no.7/2017 concerning the social security budget for 2017; in 2018, 88% of the budget was financed from contributions and 12% from the consolidated state budget – see Annex no. 1/03 of Law no. 3/2018 concerning the social security budget for 2018.



Source: BETTER FINANCE own composition based on CNPP data, 2022

However, in 2019, the legislation on calculating Pillar I old-age pensions came into force. Since September 2021, all old-age pensions will be recalculated. The new law increased the pension point value from 1,100 RON (230 Eur) to 1,265 RON (264 Eur). The pension point value will continue to increase to 1,775 lei (371 Eur) on September 1, 2020, and to 1,875 lei (386 Eur) on September 1, 2021. Starting in 2022, the pension point value will be automatically adjusted based on 100 percent of the annual inflation rate and 50 percent of the real increase in average gross wages.

The main retirement income stream is generated by Pillar I and, on average, representing 28% of the mean annual salary during the economically active period of the retiree in 2020, while the net replacement rate generated by Pillar I was 51%.[221] However, gross replacement ration continues to decline.

According to Romania's legislation, starting on 1 January 2011, the standard retirement age is 63 years for women and 65 years for men. These levels will be gradually reached as follow:

- between January 2011 and January 2015, the standard age for the pensioning of women will grow from 59 years to 60 years and for men from 62 years to 65 years;
- at the end of 2015 period retirement age will gradually increase only for women from 60 years to 63 years until 2030.

[221] See OECD, 'Pensions at a Glance 2017: OECD and G20 Indicators' (OECD Library, 2017), page 106, https://www.oecd-ilibrary.org/docserver/pension_glance-2017-en.pdf?expires=1533208010&id=id&accname=guest&checksum=D723E9620BBEC45B10FD956DCF9A420A, data accessible here https://data.oecd.org/pension/net-pension-replacement-rates.htm.

Early retirement - According to Law no. 263/2010 regarding the public pension schemes (in force since 1 January 2011) claiming early pension is possible as of a maximum 5 years before the standard retirement age, provided the worker has at least eight or more contribution years. The deduction made on early pension payment is fixed at 0.75% for each month (9% per year), which might bring a maximum deduction of 45% from the standard pension. The deduction is applied until the standard age limit is reached.

Pillar II – Funded pensions

Romania's mandatory private pensions system (Pillar II) is based on the World Bank's multi-pillar model. It is a fully funded scheme, with mandatory participation and distinct and private management of funds based on personal accounts and on the defined contribution (DC) philosophy with minimum return guarantees. The minimum return guarantee means that participants will receive at least the sum of contributions, net of fees, at retirement. Each fund has to comply, during the accumulation phase, with a minimum return mechanism that is set quarterly by national regulation and based on average market performance of all funds. Pillar II represents the privately managed mandatory pensions funds or schemes.

The beginning of Pillar II in Romania is connected with three important dates:

- January – July 2007 (Authorizing the administrators),
- 17 September 2007 – 17 January 2008 (Choosing pension fund by participants),
- 20 May 2008 (Collecting the first contributions to Pillar II).

Pillar II has been mandatory since its inception for all employees paying social security contributions under the age of 35 and voluntary (optional) for employees aged 35 to 45.[222]

Contribution collection is centralized by CNPP (The National Public Pensions Office), which collects and directs the contributions towards the mandatory pension funds.

A participant contributes during his active life and will get a pension when reaching the retirement age of 65 for men and 63 for women. The starting level of contribution was at 2% of the participant's total gross salary and it should go up by 0.5 percentage points a year, to reach 6% of total gross revenues in 2017. However, these values were never reached and the value for 2021 is still 3.7% and is expected to grow to 4.75% by 2024. The contribution level is fixed, with no possibility to contribute less or more based on individual preferences.

The contributions to a pension fund are recorded in individual personal pension account. The savings are invested by the pension fund administrator, according to the rules and quantitative limits generally set by the law regulating Pillar II vehicles.[223] Participants can choose only one pension fund.[224]

[222] Article 30 of Law no. 411/2004 regarding the privately managed pension funds.
[223] Article 23 defines the guiding principles and rules of conduct the fund administrator must follow, Article 25 defines the quantitative limits on asset allocations and Article 28(1) lists the ineligible investments (Law no. 411/2004).
[224] Article 31 of Law no. 411/2004.

Mandatory pension funds are managed by their administrators - Pension Management Companies (PMCs). Each PMC can manage only one mandatory pension fund. Mandatory pension funds operations are similar to the investment funds. PMC must obtain several licenses from Romania's pension market regulatory and supervisory body, which is the Financial Supervisory Authority (in Romanian, *Autoritatea de Supraveghere Financiară*, '**ASF**').

The ASF is in charge of control, regulation, supervision and information about private pensions as an independent administrative authority and legal entity under the control of the Romanian Parliament.

Withdrawal from the system is only allowed at the standard retirement age of participants in the private pension system.

Pillar III – Voluntary private pension

Romania's voluntary private pensions system Pillar III is also based on the World Bank's multi-pillar model. It is also a fully funded system, based on personal accounts and on the defined contribution (DC) philosophy. Pillar III represents privately managed supplementary, voluntary pensions.

The beginning of Pillar III in Romania is connected with two important dates:

- October 2006 – May 2007 (Authorizing the administrators),
- May 2007 (Collecting the first contributions to third Pillar).

Participation is open to everybody earning an income, either employees or the self-employed. Contributions are generally made through the employers in case of employees. In case of self-employed, the contributions are sent directly on the accounts managed by pension management companies. The contributions are made by the employee, with the possibility for employers to contribute a share.

Voluntary pension funds as a special purpose vehicle are managed by their administrators - Pension Management Companies (PMCs), Life Insurance Companies (LICs) or Asset Management Companies (AMCs). Each administrator is obliged to establish and operate at least one voluntary pension fund. However, in contrast to Pillar II, administrators can manage as many funds as they wish. A voluntary pension fund operates on a similar basis as investment fund. Pension fund administrators must get several licenses from Romania's Financial Supervisory Authority.

Participants to such a fund contribute during their active life and will get a pension at the age of 60 (both woman and men) if he had accumulated at least 90 contributions. The contribution is limited up to 15% of the participant's total gross income. The contribution level is flexible - it can be decided upon, changed, and even interrupted and resumed.

Pension Vehicles

Pillar II – Funded pensions

As indicated above, each PMC specifically authorized to provide Pillar II savings products in Romania is allowed to manage only one mandatory pension fund. At the introduction of the Pillar II, the total number of authorized administrators (funds) was 18. Consolidation started as early as 2009 and 2010. Currently (end of 2021), there are 7 administrators offering 7 pension funds. The two biggest mandatory pension funds (AZT and NN) serve almost 48% (according to number of participants) or 57% (according to AuM) of the market.

Each PMC is authorized and supervised by ASF. One of the most important conditions imposed on PMC is to attract at least 50,000 participants. ASF withdraws the fund's authorization if the number of participants drops below 50,000 for a quarter.

The structure of savers, assets under management and market share of respective mandatory pension fund (PMC) is presented in a table below.

Table RO2. Pension Management Companies market share in Romania (Pillar II)

Mandatory Pension Fund (PMC)	Assets under management *(in €)*	Market share based on AuM	Number of participants	Market share based on participants
ARIPI	1,614,063,367	8.97%	813,011	10.43%
METROPOLITAN LIFE*	2,487,284,736	13.82%	1,088,825	13.97%
AZT VIITORUL TAU	3,853,165,380	21.41%	1,633,410	20.96%
BCR	1,228,667,838	6.83%	716,339	9.19%
BRD	713,839,486	3.97%	502,251	6.44%
NN	6,295,813,792	34.98%	2,060,322	26.44%
VITAL	1,804,616,909	10.03%	978,929	12.56%
TOTAL	**17,997,451,508**	**100,00%**	**7,793,087**	**100.00%**

Source: Own calculation (https://www.asfromania.ro/), 2022

Mandatory pension funds' investment strategy is very strictly regulated. The law imposes percentage limits for different asset classes.

Mandatory pension funds can invest:

- up to 20% in money market instruments;
- up to 70% in State bonds of Romania, the EU or EEA;
- up to 30% in bonds and other transferable securities issued by the local public administrations in Romania, the EU or EEA, traded on a regulated market in RO, EU or EEA;
- up to 50% in securities traded on a regulated market in Romania. the EU or EEA;
- up to 15% in bonds issued by third-party states, traded on a regulated market in Romania, the EU or EEA;

- up to 10% in bonds and other transferable securities issued by the local public administration in third-party states, traded on a regulated market in Romania. the EU or EEA;
- up to 15% in bonds issued by the World Bank. the European Bank for Reconstruction and Development and the European Investment Bank, traded on a regulated market in Romania, the EU or EEA;
- up to 5% in bonds issued by Non-governmental Foreign Bodies, traded on a regulated market in Romania, the EU or EEA;
- up to 5% in units issued by Undertakings for Collective Investment in Transferable Securities – UCITS, including ETF in Romania, the EU or EEA;
- up to 3% in ETC`s and equity securities issued by non UCITS set up as closed investment funds, traded on a regulated market in Romania, the EU or EEA;
- up to 10% in private equity - only for voluntary pension funds.

There is no explicitly defined general quantitative limit on equity investments.

Aside from the quantitative restrictions by asset class, fund managers have quantitative limits by type of issuer:

- 10% of the total number of shares issued by one issuer;
- 10% of the preferential shares issued by one issuer;
- 25% of the equity securities issued by an UCITS, ETF, non UCITS closed investment fund or ETC;
- 10% of an issuer's bonds, with the exception of the state bonds.

Mandatory pension funds can invest all their assets abroad. There are no explicit restrictions regarding investments made abroad.

Pension funds can have one of three possible risk profiles, which are calculated on a daily basis according to a formula established by ASF regulations:

- low risk (risk level up to and including 10%),
- medium risk (risk level between 10%, exclusively, and 25%, inclusively),
- high risk (risk level between 25%, exclusively, and 50%, inclusively).

Pillar III – Voluntary private pensions

The Romanian Pillar III allows each administrator (PMC, LIC or AMC) to manage as many voluntary pension funds as they prefer. At its inception, there were only four providers and six voluntary pension funds. Currently (at the end of 2021), there was 8 providers offering 10 voluntary pension funds. Only two administrators (NN and AZT) are currently offering more than one voluntary pension fund.

Each administrator in Pillar III (PMC, LIC or AMC) is authorized by ASF and must get several licenses from ASF. ASF withdraws the fund's authorization if the number of participants drops below 100 for a quarter.

Voluntary pension funds are also constituted by civil contract and authorized by ASF. Accounting of the voluntary pension fund is separated from the administrator.

Investment rules in the voluntary private pension pillar are the same as in the mandatory pillar (see quantitative and restriction limits for different asset classes in the text above), with less strict limits on private equity (5%) and commodities (5%).

The structure of savers, assets under management and market share of respective voluntary pension fund is presented in a table below.

Table RO3. Pension Management Companies market share in Romania (Pillar III)

Risk profile	Mandatory Pension Fund (PMC)	Assets under management *(in €)*	Market share based on AuM	Number of participants	Market share based on participants
High	AZT VIVACE	26,665,481	3.81%	20,863	3.69%
	NN ACTIV	83,655,737	11.95%	59,895	10.61%
Medium	AZT MODERATO	72,324,669	10.33%	45,796	8.11%
	BCR PLUS	119,540,487	17.08%	141,349	25.36%
	BRD MEDIO	36,733,143	5.425	36,327	6.44%
	NN OPTIM	300,362,583	42.91%	212,324	37.61%
	PENSIA MEA	25,643,256	3.66%	22,322	3.95%
	RAIFFEISEN ACUMULARE	25,943,152	3.71%	16,151	2.86%
	STABIL	6,862,195	0.98%	5,524	0.98%
	AEGON ESENTIAL	2,269,459	0.32%	3,948	0.70%
	TOTAL	**700,000,127**	**100.00%**	**564,472**	**100.00%**

Source: Own calculation (https://www.asfromania.ro/), 2022

Charges

Pillar II – Funded pensions

According to the Mandatory Pensions Law, the fund manager's income resulted from the administration of privately administrated pension funds are composed of:

- management fees and commissions;
- transfer penalties (covered from personal assets, in case of moving to another fund/PFC earlier than in 2 years – between 3.5% and 5%);
- tariffs for additional information services, in particular:
    - Depositary commission (depository fee);
    - Transaction costs (trading fees);
    - Bank commissions (banking fees);
    - Fund auditing taxes (pension fund auditing fees).

Since 2019, the administration fee is established by:

a) deducting an amount from the contributions paid, but not higher than 1.0%, before the conversion of contributions into fund units (Management commission), of which 0.5% is transferred to the National House of Public Pensions (Casa Nationala de Pensii Publice; the organization that administers the social insurance program);

b) Management fee - 0.02% to 0.07% of net assets under management, depending on the fund's rate of return relative to the inflation rate. Before 2019, the maximum monthly management fee was 0.05 percent.

The transfer penalty represents the amount paid by the participant in the event of a transfer to another administrator, occurring within two years of the subscription date to the private pension fund, with the maximum ceiling of this penalty being established by ASF and set at maximum 5% of assets (Norm CSSPP 12/2009 for Pillar II and Norm 14/2006 for Pillar III).

The fund also pays for the annual auditing fee (Fund auditing taxes) and the rest of the fund's expenses (custody, depositary, transaction/trading expenses) must be supported by the pension company (the administrator). The next table compares effective charges of mandatory pension funds in Pillar II over time (calculated via total and net NAV).

Table RO4. Effective annual charges in mandatory pension funds (Pillar II) in %														
Mandatory pension fund	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
ARIPI	1.23	0.86	0.75	0.68	0.63	0.62	0.62	0.63	0.61	0.58	0.63	0.49	0.49	0.60
METROPOLITAN LIFE	0.54	0.70	0.65	0.61	0.62	0.60	0.59	0.60	0.58	0.56	0.61	0.59	0.59	0.47
AZT VIITORUL TAU	0.56	0.69	0.66	0.60	0.61	0.61	0.60	0.60	0.58	0.56	0.61	0.48	0.47	0.47
BCR	1.69	0.93	0.75	0.64	0.63	0.62	0.63	0.61	0.58	0.56	0.62	0.48	0.60	0.47
BRD	2.4	1.11	0.87	0.75	0.70	0.62	0.62	0.64	0.60	0.56	0.61	0.47	0.48	0.37
NN	0.55	0.62	0.61	0.58	0.62	0.60	0.60	0.60	0.58	0.56	0.61	0.48	0.48	0.47
VITAL	0.00	0.58	0.79	0.70	0.65	0.64	0.61	0.61	0.58	0.56	0.61	0.60	0.60	0.47
EUREKO	*0.36*	*0.12*	*0.84*	*0.60*	*0.60*	*0.60*						*0.00*	*0.00*	*0.00*
PENSIA VIVA	*0.12*	*0.60*	*0.60*	*0.60*	*0.60*							*0.00*	*0.00*	*0.00*
BANCPOST	*8.4*											*0.00*	*0.00*	*0.00*
KD	*5.88*	*0.60*										*0.00*	*0.00*	*0.00*
OMNIFORTE	*2.4*											*0.00*	*0.00*	*0.00*
OTP	*14.6*	*6.00*										*0.00*	*0.00*	*0.00*
PRIMA PENSIE	*8.88*	*6.72*										*0.00*	*0.00*	*0.00*
TOTAL	**0.77**	**0.70**	**0.66**	**0.61**	**0.62**	**0.61**	**0.60**	**0.60**	**0.58**	**0.56**	**0.61**	**0.51**	**0.51**	**0.48**

Source: Own calculations based on ASF Romania data, 2022 (data as of December 2021)

Pillar III – Voluntary private pensions

According to the Voluntary Pensions Law,[225] the administrator shall charge a fee from participants and beneficiaries for the management of a pension fund.

- The levels of fees shall be established in the pension scheme prospectus and shall be the same for all participants and beneficiaries;
- Participants shall be notified of any change to the fees at least 6 months before it is applied.

The administrator's revenue will come from:

- management commission (up to 5% from the contributions) and management fee (up to 0.2% monthly from total gross assets in pension fund);
- transfer penalties (covered from personal assets, in case of moving to another fund/PFC earlier than in 2 years – 5%);
- fees for services requested by participants:
    - Depositary commission (depository fee);
    - Transaction costs (trading fees);
    - Bank commissions (banking fees);
    - Fund auditing taxes (pension fund auditing fees).

Management fees are made up of:

[225] Law number 204/2006 concerning voluntary pensions

a) deduction of a percentage from contributions paid by participants; this percentage cannot be higher than 5% and must be made before contributions are converted into fund units (Management commission);
b) deduction of a negotiated percentage from the net assets of the voluntary pension fund; this percentage cannot be higher than 0.2% per month and shall be mentioned in the pension scheme prospectus (Management fee).

A transfer penalty is applicable (paid by the participant) in the event of a transfer to another fund within two years of having joined the previous fund; its upper limit is established by Commission norms. The next table compares effective charges of voluntary pension funds in pillar III over time (calculated via total and net NAV).

Table RO5. Effective annual charges of voluntary pension funds (Pillar III)

Voluntary pension fund	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AZT VIVACE	1.05%	1.47%	2.83%	2.83%	2.52%	2.06%	2,00%	1.91%	1.84%	1.74%	1.67%	1.79%	2.14%	2.04%	2.00%
NN ACTIV	0.04%	1.64%	1.85%	2.38%	2.19%	2.34%	2.14%	2.09%	2.17%	2.1%	1.95%	2.11%	2.04%	2.02%	2.01%
AZT MODERATO	0.99%	1.83%	2.16%	1.86%	1.66%	1.41%	1.33%	1.28%	1.24%	1.18%	1.13%	1.21%	1.56%	1.51%	1.49%
BCR PLUS	5.61%	2.38%	2.28%	2.77%	2.44%	2.4%	2.23%	2.27%	2.16%	2.03%	1.97%	2.16%	2.11%	2.07%	2.06%
BRD MEDIO	0,00%	0,00%	0.85%	1.9%	1.56%	2.86%	2.18%	2.14%	2.2%	2.11%	1.91%	2.18%	2.05%	2.15%	2.13%
*CONCORDIA MODERAT**	0,00%	*0,00%*	*1.47%*	*1.47%*	*1.43%*	*1.46%*	0,00%	0,00%	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0.00%*	*0.00%*
*EUREKO CONFORT**	0,00%	0,00%	*0.05%*	*0,00%*	*0.18%*	*0.06%*	*0.14%*	*0.07%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0.00%*	*0.00%*
NN OPTIM	0.09%	1.58%	1.68%	2.09%	1.97%	2.05%	1.99%	1.97%	2,00%	1.94%	1.85%	2,00%	1.96%	1.95%	1.94%
PENSIA MEA	3.22%	3.17%	2.85%	2.66%	2.66%	2.7%	2.66%	2.66%	2.64%	2.43%	2.37%	2.56%	2.51%	2.50%	2.46%
RAIFFEISEN ACUMULARE	0,00%	0.15%	2.93%	2.4%	2.23%	2.15%	2.43%	2.26%	2.47%	2.16%	2.06%	2.19%	2.02%	1.99%	1.99%
STABIL	0,00%	0,00%	2.26%	1.61%	1.5%	1.65%	1.63%	3.16%	3.71%	3.37%	2.8%	2.99%	2.81%	2.74%	2.69%
AEGON ESENTIAL	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	1.87%	3.15%	2.99%	3.12%	2.86%	2.73%	2.60%
*BRD PRIMO**	0,00%	0,00%	*0.83%*	*1.57%*	0,00%	0,00%	0,00%	0,00%	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0.00%*	*0.00%*
*OTP STRATEG**	*708.75%*	*19.1%*	*3.8%*	*2.91%*	0,00%	0,00%	0,00%	0,00%	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0,00%*	*0.00%*	*0.00%*
TOTAL	**4.72%**	**1.91%**	**2.12%**	**2.3%**	**2.09%**	**2.1%**	**1.99%**	**1.99%**	**2.01%**	**1.92%**	**1.83%**	**1.99%**	**1.99%**	**1.98%**	**1.96%**

Source: Own calculations based on ASF Romania data, 2022 (data as of December 2021)

* Closed

The year 2021 brought no significant change in effective annual charges, and the Pillar III confirmed that the Pillar III pension funds remain expensive pension vehicles for effective pension wealth building process.

Taxation

Pillar II – Funded pensions

Romania applies an EET system for the taxation of future mandatory accounts. Employee contributions are tax-deductible and investment income on the level of the pension fund is tax-exempt. Pension benefits paid out during retirement will be subject to a personal income tax (10% tax rate) above a certain level.

Pillar III – Voluntary private pensions

The amount of contributions to voluntary pension funds is fiscally deductible from each subscriber's gross monthly wage or any other assimilated revenue if the total amount is not greater than the equivalent in RON of €400 in a fiscal year. The same rule applies to the employer, meaning that the employer can deduct the amount paid to the employee's voluntary pension account up to €400 annually.

The investment returns achieved by the third pillar fund are tax exempt until the moment of payments toward subscribers' start. The pension benefits paid from Pillar III are subject to personal income tax, thus representing an 'EET' regime.

Pension Returns

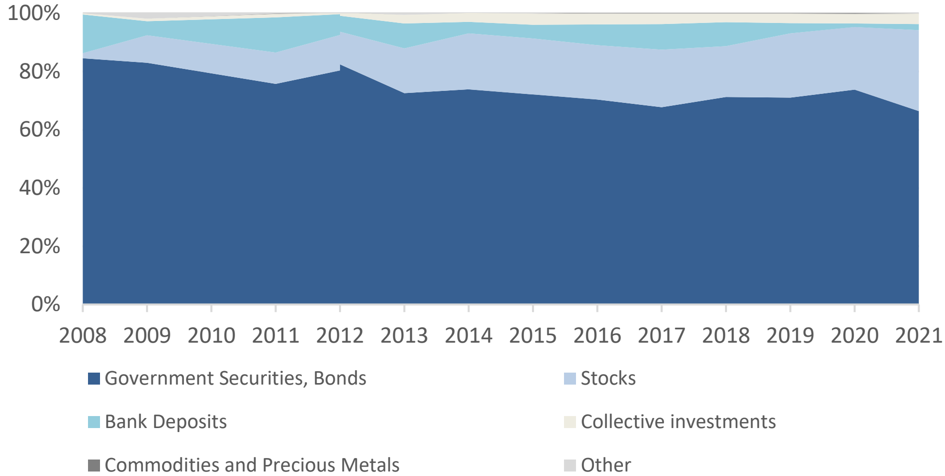
Pillar II – Funded pensions

Seven asset managers offer seven mandatory pension funds in Romania. Performance analysis reveals similarities in their investment strategy, implying similarity in the pension funds' portfolio structure.

Romanian mandatory pension funds invest mostly in government securities and bonds asset classes. The second most important asset class (from the portfolio structure point of view) are equities and the third most important are bank deposits. Three other classes have minimal impact on pension fund's performance. The portfolio structure of the Romanian Pillar II is presented below. According to the data available, currently almost 74% of all investments in Pillar II pension funds are bond investments and less than 22% is invested in equities despite relatively young age structure of savers. More detailed data on Pillar II portfolio structure is presented below.

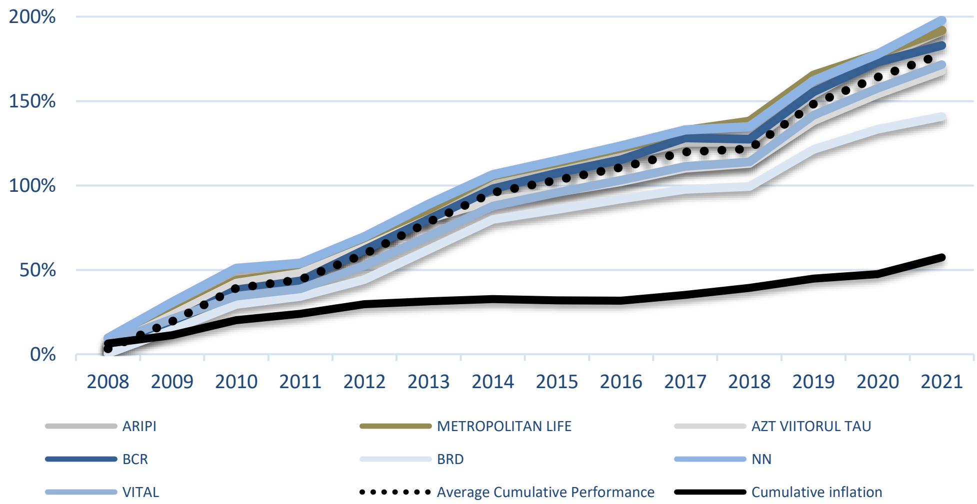
For the purpose of this study, we simplified the portfolio structure to only six main asset classes.

Graph RO1. Portfolio structure of Pillar II mandatory pension funds



Mandatory Pension Funds' performance compared to the inflation index is presented below.

Graph RO2. Pillar II Mandatory Pension Funds – Cumulative Nominal Performance



Source Own elaboration based on ASF Romania data, 2022

Nominal as well as real returns of Pillar II pension funds in Romania, weighted by AuM, are presented in a table below.

Table RO6. Nominal and Real Returns of II. Pillar in Romania						
2008		-4.10%			-10.47%	
2009		11.64%			6.94%	
2010		14.34%			6.39%	
2011		1.76%			-1.42%	
2012		7.53%			2.97%	
2013		10.82%			9.50%	
2014	Nominal return after charges, before inflation and taxes	8.63%	5.38%	Real return after charges and inflation and before taxes	7.59%	2.04%
2015		2.75%			3.43%	
2016		3.42%			3.51%	
2017		1.58%			-1.00%	
2018		0.95%			-2.07%	
2019		9.10%			5.05%	
2020		4.39%			2.59%	
2021		4.12%			-2.58%	

Source: Own calculation (https://www.asfromania.ro/), 2022

To indicate the evolution of annualized performance (nominal as well as real) of Pillar II pension funds in Romania based on different holding periods, see the summary table below.

Table RO7. Nominal and Real Returns of II. Pillar in Romania		
Holding Period	Net Nominal Annualized Performance	Real Net Annualized Performance
1-year	4.12%	-2.58%
3-years	5.84%	1.64%
5-years	3.99%	0.35%
7-year	3.73%	1.23%
10-years	5.28%	2.83%
Since inception	5.38%	1.91%

Source: Own calculation (https://www.asfromania.ro/), 2022

In general, we can confirm very similar performance of all provided pension funds, which lead us to a question of real competition and adjustment of the portfolio structure towards the length of the saving (holding) horizon.

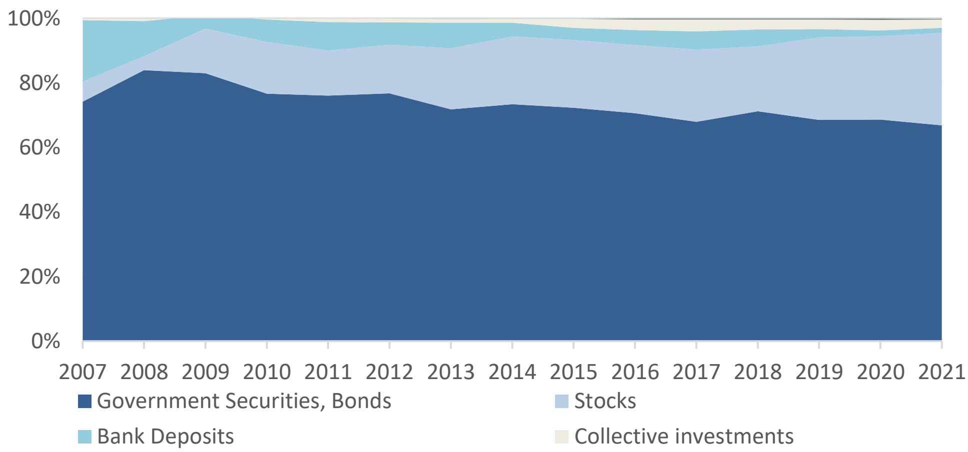
Pillar III – Voluntary private pensions

The eight asset managers offer 10 voluntary pension funds in Romania. AZT and NN are the only providers which offer two voluntary pension funds. The performance of all pension funds shows the same finding as with Pillar II mandatory pension funds - there is similarity in voluntary pension funds' investment strategy. Performance results also imply a similarity in pension funds' portfolio structure.

Analysing the portfolio structure of voluntary pension funds based on CSSPP data, we can conclude that most of the performance is tied to the Government Securities and Bonds asset classes. The second most important asset class (from the portfolio structure point of view) is equities and the third most important is bank deposits. The three other classes have minimal impact on pension fund's performance results.

Portfolio structure of Romanian Pillar III voluntary pension funds is presented below. According to the data for 2021, around 68% of all investments in Pillar III pension funds are bond investments and about 30% is invested in stocks and collective investment vehicles (UCITS funds). Overall, Pillar III portfolio structure is very similar to that of Pillar II over the whole analysed period. The difference in the performance could therefore be devoted to the negative impact of fees, which are significantly higher in Pillar III.

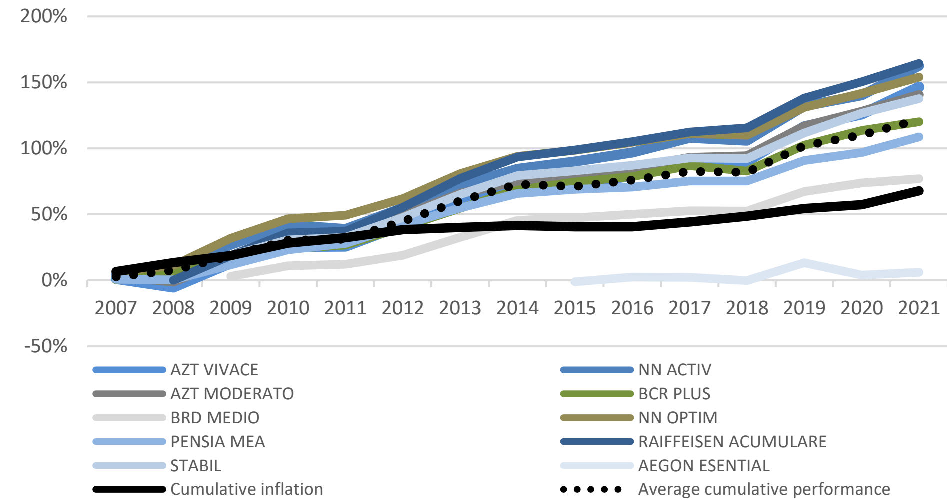
Graph RO3. Portfolio structure of Pillar III voluntary pension funds



Source: Own calculation (https://www.asfromania.ro/), 2022

All voluntary pension funds' performance on a cumulative basis compared to the inflation index is presented in the graph below.

Graph RO4. Voluntary Pension Funds – Cumulative Nominal Performance



Source: Own calculation (https://www.asfromania.ro/), 2022

Nominal as well as real returns of voluntary pension funds in Romania, weighted by AuM, are presented in a summary table below.

Table RO8. Nominal and Real Returns of III. Pillar in Romania						
2007		-12.09%			-18.75%	
2008		-9.26%			-15.64%	
2009		9.31%			4.61%	
2010		10.47%			2.52%	
2011		0.14%			-3.03%	
2012	Nominal return after charges, before inflation and taxes	6.96%	**2.63%**	Real return after charges and inflation and before taxes	2.40%	**-1.00%**
2013		10.70%			9.39%	
2014		7.20%			6.16%	
2015		1.61%			2.29%	
2016		2.57%			2.66%	
2017		1.30%			-1.29%	
2018		-0.76%			-3.78%	
2019		8.04%			3.99%	
2020		2.79%			0.99%	
2021		3.63%			-3.07%	

Source: Own calculation (https://www.asfromania.ro/), 2022

To indicate the evolution of annualized performance (nominal as well as real) of Pillar III voluntary pension funds in Romania based on different holding periods, see the summary table below.

Table RO9. Nominal and Real Returns of Pillar III (Voluntary Pension Funds) in Romania		
Holding Period	Net Nominal Annualized Performance	Real Net Annualized Performance
1-year	3.63%	-3.07%
3-years	4.80%	0.6%
5-years	2.96%	-0.67%
7-year	2.71%	0.22%
10-years	4.35%	1.90%
Since inception	2.63%	-1.00%

Source: Own calculation (https://www.asfromania.ro/), 2022

Conclusions

Romania's population is rapidly decreasing and aging, which – unless they adopt the necessary reforms - will lead to the explosion of the demographic bomb in a few decades. That is why Romania introduced the private pensions system in 2007, which is based on the model tested and recommended by the World Bank. The multi-pillar private pensions system includes Pillar II (mandatory schemes) and Pillar III (voluntary schemes).

In the public PAYG pensions system, the state collects contributions from employees and redistributes the money among existing pensioners. Demographics show that this redistribution logic is no longer viable, as contributors' numbers will fall, and the number of pensioners is already going up. The departure from this dilemma takes the form of the private pensions system, allowing each active person to save for their own future retirement.

Romanian pillar II is a fully funded system based on personal accounts and on the defined contribution (DC) philosophy. Pillar II is mandatory for all employees aged under 35 years and voluntary (optional) for employees aged 35 to 45. The starting level of contribution was set at 2% of the participant's total gross income and increases by 0.5 percentage points annually until it reaches 6 of total gross income in 2017. However, this level has not been reached, and the contribution system has inversed.

Mandatory pension funds are managed by their administrators - Pension Management Companies (PMCs). Each PMC is obliged by respective law to administrate and manage just one mandatory pension fund. Currently, there are seven PMCs managing seven mandatory funds on the Romanian Pillar II market. The market is dominated by two PMCs (AZT and NN).

Romanian pillar III is also a fully funded system based on personal accounts and on the defined contribution (DC) philosophy. Pillar III represents privately managed supplementary pensions. This system is opened to all income cohorts. The tax advantage contribution is limited to 15 of participant's total gross income.

Voluntary pension funds in Pillar III are managed by their administrators - Pension Management Companies (PMCs), Life Insurance Companies (LICs) or Asset Management Companies (AMCs). Each administrator is obliged to establish and operate at least one voluntary pension fund. Currently, there are eight providers offering 10 voluntary pension funds. Pillar III market is fairly concentrated, where three dominant players cover almost 90 of the market.

Mandatory as well as voluntary pension funds' investment strategy is strictly regulated. The law imposes percentage limits and restrictions for different asset classes. It must be noted that investment rules in mandatory and voluntary system are very similar. This fact logically causes implications on portfolio structure, thus also on performance of mandatory and voluntary pension funds in Romania. Currently about 70% of all investments in Pillar II as well as Pillar III pension funds are bond investments (Romanian Government Money market instruments and Bonds) and only about 22 is invested in equities, which could raise a question about suitability of portfolio structure with regard to the age structure of savers.

Overall, the real return of pension funds in Pillar II as well as Pillar III are positive and well above the inflation. However, considering the fee structure, Pillar II savers are better positioned as the charges are almost 5-times lower than the fees applied in Pillar III.

Policy considerations

Romania's pension system is among the few to require mandatory enrolment in occupational pension funds, determining a large coverage of the active population. Further measures to stimulate the labour force between 35 and 45 years old would be beneficial, as well as an increased contribution rate to Pillar II funds. In addition, fiscal stimulus and financial education for voluntary pensions would be welcomed to incentivise households to save additionally in Pillar III products.

In addition, bearing in mind the general and constant research results on the correlation between cost and performance in investment funds, one consideration would be to further cap the total costs for privately managed occupational pension funds (Pillar II).

Last, considering the detrimental effects inflation have on nominal net returns, the minimum return rate for occupational pension funds should factor in inflation and require, for instance, a certain positive **real net** return.

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Acronyms

AIF	Alternative Investment Fund
AMC	Annual Management Charges
AuM	Assets under Management
BE	Belgium
BG	Bulgaria
Bln	Billion
BPETR	'Barclay's Pan-European High Yield Total Return' Index
CAC 40	'Cotation Assistée en Continu 40' Index
CMU	Capital Markets Union
DAX 30	'Deutsche Aktieindex 30' Index
DB	Defined Benefit plan
DC	Defined Contribution plan
DE	Germany
DG	Directorate General of the Commission of the European Union
DK	Denmark
DWP	United Kingdom's Governmental Agency Department for Work and Pensions
EBA	European Banking Authority
EE	Estonia
EEE	Exempt-Exempt-Exempt Regime
EET	Exempt-Exempt-Tax Regime
ETF	Exchange-Traded Fund
EIOPA	European Insurance and Occupational Pensions Authority
ES	Spain
ESAs	European Supervisory Authorities
ESMA	European Securities and Markets Authority
EU	European Union
EURIBOR	Euro InterBank Offered Rate
EX	Executive Summary
FR	France
FSMA	Financial Services and Market Authority (Belgium)
FSUG	Financial Services Users Group - European Commission's Expert Group
FTSE 100	The Financial Times Stock Exchange 100 Index
FW	Foreword
GDP	Gross Domestic Product
HICP	Harmonised Indices of Consumer Prices
IBEX 35	Índice Bursátil Español 35 Index

IKZE	'Indywidualne konto zabezpieczenia emerytalnego' – Polish specific Individual pension savings account
IRA	United States specific Individual Retirement Account
IT	Italy
JPM	J&P Morgan Indices
KIID	Key Investor Information Document
LV	Latvia
NAV	Net Asset Value
Mln	Million
MSCI	Morgan Stanley Capital International Indices
NL	Netherlands
OECD	The Organisation for Economic Co-Operation and Development
OFT	United Kingdom's Office for Fair Trading
PAYG	Pay-As-You-Go Principle
PIP	Italian specific 'Individual Investment Plan'
PL	Poland
PRIIP(s)	Packaged Retail and Insurance-Based Investment Products
RO	Romania
S&P	Standard & Poor Indexes
SE	Sweden
SK	Slovakia
SME	Small and Medium-sized Enterprise
SPIVA Scorecard	Standard & Poor Dow Jones' Indices Research Report on Active Management performances
TEE	Tax-Exempt-Exempt Regime
TCR/TER	Total Cost Ratio/ Total Expense Ratio
UCITS	Undertakings for the Collective Investment of Transferable Securities
UK	United Kingdom

Glossary of terms

Accrued benefits* – is the amount of accumulated pension benefits of a pension plan member on the basis of years of service.

Accumulated assets* – is the total value of assets accumulated in a pension fund.

Active member* – is a pension plan member who is making contributions (and/or on behalf of whom contributions are being made) and is accumulating assets.

AIF(s) – or Alternative Investment Funds are a form of collective investment funds under E.U. law that do not require authorization as a UCITS fund.[289]

Annuity* – is a form of financial contract mostly sold by life insurance companies that guarantees a fixed or variable payment of income benefit (monthly, quarterly, half-yearly, or yearly) for the life of a person(s) (the annuitant) or for a specified period of time. It is different than a life insurance contract which provides income to the beneficiary after the death of the insured. An annuity may be bought through instalments or as a single lump sum. Benefits may start immediately or at a pre-defined time in the future or at a specific age.

Annuity rate* – is the present value of a series of payments of unit value per period payable to an individual that is calculated based on factors such as the mortality of the annuitant and the possible investment returns.

Asset allocation* – is the act of investing the pension fund's assets following its investment strategy.

Asset management* – is the act of investing the pension fund's assets following its investment strategy.

Asset manager* – is(are) the individual(s) or entity(ies) endowed with the responsibility to physically invest the pension fund assets. Asset managers may also set out the investment strategy for a pension fund.

Average earnings scheme* – is a scheme where the pension benefits earned for a year depend on how much the member's earnings were for the given year.

Basic state pension* – is a non-earning related pension paid by the State to individuals with a minimum number of service years.

Basis points (bps) – represent the 100th division of 1%.

Benchmark (financial) – is a referential index for a type of security. Its aim is to show, customized for a level and geographic or sectorial focus, the general price or performance of the market for a financial instrument.

[289] See Article 4(1) of Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010, OJ L 174, 1.7.2011, p. 1–73.

Beneficiary* – is an individual who is entitled to a benefit (including the plan member and dependants).

Benefit* – is a payment made to a pension fund member (or dependants) after retirement.

Bonds – are instruments that recognize a debt. Although they deliver the same utility as bank loans, i.e., enabling the temporary transfer of capital from one person to another, with or without a price (interest) attached, bonds can also be issued by non-financial institutions (States, companies) and by financial non-banking institutions (asset management companies). In essence, bonds are considered more stable (the risk of default is lower) and in theory deliver a lower, but fixed, rate of profit. Nevertheless, Table EX2 of the Executive Summary shows that the aggregated European Bond Index highly overperformed the equity one.

Closed pension funds* – are the funds that support only pension plans that are limited to certain employees. (e.g., those of an employer or group of employers).

Collective investment schemes – are financial products characterised by the pooling of funds (money or asset contributions) of investors and investing the total into different assets (securities) and managed by a common asset manager. Under E.U. law collective investment schemes are regulated under 6 different legal forms: UCITS (see below), the most common for individual investors; AIFs (see above), European Venture Capital funds (EuVECA), European Long-Term Investment Funds (ELTIFs), European Social Entrepreneurship Funds (ESEF) or Money Market Funds.[290]

Contribution* – is a payment made to a pension plan by a plan sponsor or a plan member.

Contribution base* – is the reference salary used to calculate the contribution.

Contribution rate* – is the amount (typically expressed as a percentage of the contribution base) that is needed to be paid into the pension fund.

Contributory pension scheme* – is a pension scheme where both the employer and the members have to pay into the scheme.

Custodian* – is the entity responsible, as a minimum, for holding the pension fund assets and for ensuring their safekeeping.

Deferred member* – is a pension plan member that no longer contributes to or accrues benefits from the plan but has not yet begun to receive retirement benefits from that plan.

Deferred pension* – is a pension arrangement in which a portion of an employee's income is paid out at a date after which that income is actually earned.

Defined benefit (DB) occupational pension plans* – are occupational plans other than defined contributions plans. DB plans generally can be classified into one of three main types, "traditional", "mixed" and "hybrid" plans. These are schemes where "the pension payment is defined as a percentage of income and employment career. The employee receives a thus pre-defined pension and does not bear the risk of longevity and the risk of investment. Defined

[290] See European Commission, 'Investment Funds' (28 August 2019) https://ec.europa.eu/info/business-economy-euro/growth-and-investment/investment-funds_en.

Benefits schemes may be part of an individual employment contract or collective agreement. Pension contributions are usually paid by the employee and the employer".[291]

"Traditional" DB plan* – is a DB plan where benefits are linked through a formula to the members' wages or salaries, length of employment, or other factors.

"Hybrid" DB plan* – is a DB plan where benefits depend on a rate of return credited to contributions, where this rate of return is either specified in the plan rules, independently of the actual return on any supporting assets (e.g. fixed, indexed to a market benchmark, tied to salary or profit growth, etc.), or is calculated with reference to the actual return of any supporting assets and a minimum return guarantee specified in the plan rules.

"Mixed" DB plan* – is a DB plans that has two separate DB and DC components, but which are treated as part of the same plan.

Defined contribution (DC) occupational pension plans* – are occupational pension plans under which the plan sponsor pays fixed contributions and has no legal or constructive obligation to pay further contributions to an ongoing plan in the event of unfavourable plan experience. These are schemes where "the pension payment depends on the level of defined pension contributions, the career and the returns on investments. The employee has to bear the risk of longevity and the risk of investment. Pension contributions can be paid by the employee and/or the employer and/or the state".[292]

Dependency ratio* – are occupational pension plans under which the plan sponsor pays fixed contributions and has no legal or constructive obligation to pay further contributions to an ongoing plan in the event of unfavourable plan experience.

Early retirement* – is a situation when an individual decides to retire earlier later and draw the pension benefits earlier than their normal retirement age.

Economic dependency ratio* – is the division between the number of inactive (dependent) population and the number of active (independent or contributing) population. It ranges from 0% to 100% and it indicates how much of the inactive population's (dependent) consumption is financed from the active population's (independent) contributions.[293] In general, the inactive (dependent) population is represented by children, retired persons and persons living on social benefits.

EET system* – is a form of taxation of pension plans, whereby contributions are exempt, investment income and capital gains of the pension fund are also exempt, and benefits are taxed from personal income taxation.

[291] Werner Eichhorst, Maarten Gerard, Michael J. Kendzia, Christine Mayrhruber, Connie Nielsen, Gerhard Runstler, Thomas Url, 'Pension Systems in the EU: Contingent Liabilities and Assets in the Public and Private Sector' EP Directorate General for Internal Policies IP/A/ECON/ST/2010-26.
[292] Ibid.
[293] For more detail on the concept, see Elke Loichinger, Bernhard Hammer, Alexia Prskawetz, Michael Freiberger, Joze Sambt, 'Economic Dependency Ratios: Present Situation and Future Scenarios' MS13 Policy Paper on Implications of Population Ageing for Transfer Systems, Working Paper no. 74, 18th December 2014, 3.

Equity (or stocks/shares) – are titles of participation to a publicly listed company's economic activity. With regards to other categorizations, an equity is also a security, a financial asset or, under E.U. law, a transferable security.[294]

ETE system* – is a form of taxation whereby contributions are exempt, investment income and capital gains of the pension fund are taxed, and benefits are also exempt from personal income taxation.

ETF(s) – or Exchange-Traded Funds are investment funds that are sold and bought on the market as an individual security (such as shares, bonds). ETFs are structured financial products, containing a basket of underlying assets, and are increasingly more used due to the very low management fees that they entail.

Fund member* – is an individual who is either an active (working or contributing, and hence actively accumulating assets) or passive (retired, and hence receiving benefits), or deferred (holding deferred benefits) participant in a pension plan.

Funded pension plans* – are occupational or personal pension plans that accumulate dedicated assets to cover the plan's liabilities.

Funding ratio (funding level) * – is the relative value of a scheme's assets and liabilities, usually expressed as a percentage figure.

Gross rate of return* – is the rate of return of an asset or portfolio over a specified time period, prior to discounting any fees of commissions.

Gross/net replacement rate – is the ratio between the pre-retirement gross or net income and the amount of pension received by a person after retirement. The calculation methodology may differ from source to source as the average working life monthly gross or net income can used to calculate it (divided by the amount of pension) or the past 5 year's average gross income etc. (see below **OECD net replacement rate**).

Group pension funds* – are multi-employer pension funds that pool the assets of pension plans established for related employers.

Hedging and hedge funds – while hedging is a complex financial technique (most often using derivatives) to protect or reduce exposure to risky financial positions or to financial risks (for instance, currency hedging means reducing exposure to the volatility of a certain currency), a hedge fund is an investment pool that uses complex and varying investment techniques to generate profit.

Indexation* – is the method with which pension benefits are adjusted to take into account changes in the cost of living (e.g., prices and/or earnings).

Individual pension plans* – is a pension fund that comprises the assets of a single member and his/her beneficiaries, usually in the form of an individual account.

[294] Article 4(44) of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, OJ L 173, p. 349–496 (MiFID II).

Industry pension funds* – are funds that pool the assets of pension plans established for unrelated employers who are involved in the same trade or businesses.

Mandatory contribution* – is the level of contribution the member (or an entity on behalf of the member) is required to pay according to scheme rules.

Mandatory occupational plans* – Participation in these plans is mandatory for employers. Employers are obliged by law to participate in a pension plan. Employers must set up (and make contributions to) occupational pension plans which employees will normally be required to join. Where employers are obliged to offer an occupational pension plan, but the employees' membership is on a voluntary basis, these plans are also considered mandatory.

Mandatory personal pension plans* - are personal plans that individuals must join, or which are eligible to receive mandatory pension contributions. Individuals may be required to make pension contributions to a pension plan of their choice normally within a certain range of choices or to a specific pension plan.

Mathematical provisions (insurances) – or *mathematical reserves* or *reserves*, are the value of liquid assets set aside by an insurance company that would be needed to cover all current liabilities (payment obligations), determined using actuarial principles.

Minimum pension* – is the minimum level of pension benefits the plan pays out in all circumstances.

Mixed indexation* – is the method with which pension benefits are adjusted taking into account changes in both wages and prices.

Money market instruments – are short-term financial products or positions (contracts) that are characterized by the very high liquidity rate, such as deposits, short-term loans, repo-agreements and so on.

MTF – multilateral trading facility, is the term used by the revised Markets in Financial Instruments Directive (MiFID II) to designate securities exchanges that are not a regulated market (such as the London Stock Exchange, for example).

Multi-employer pension funds* – are funds that pool the assets of pension plans established by various plan sponsors. There are three types of multi-employer pension funds:

a) for related employers i.e., companies that are financially connected or owned by a single holding group (group pension funds);

b) for unrelated employers who are involved in the same trade or business (industry pension funds);

c) for unrelated employers that may be in different trades or businesses (collective pension funds).

Money-Weighted Returns (MWR) - also referred to as the internal rate of return, is a measurement of performance that takes into account cash flows (contributions) when calculating returns.

NAV – Net Asset Value, or the amount to which the market capitalisation of a financial product (for this report, pension funds' or insurance funds' holdings) or a share/unit of it arises at a given point. In general, the Net Asset Value is calculated per unit or share of a collective investment scheme using the daily closing market prices for each type of security in the portfolio.

Net rate of return* – is the rate of return of an asset or portfolio over a specified time period, after discounting any fees of commissions.

Normal retirement age* – is the age from which the individual is eligible for pension benefits.

Non-contributory pension scheme* – is a pension scheme where the members do not have to pay into scheme.

Occupational pension plans* – access to such plans is linked to an employment or professional relationship between the plan member and the entity that establishes the plan (the plan sponsor). Occupational plans may be established by employers or groups of thereof (e.g., industry associations) and labour or professional associations, jointly or separately. The plan may be administrated directly by the plan sponsor or by an independent entity (a pension fund or a financial institution acting as pension provider). In the latter case, the plan sponsor may still have oversight responsibilities over the operation of the plan.

Eurostat aggregate replacement rate for pensions refers to median individual pension income of population aged 65-74 relative to median individual earnings from work of population aged 50-59, excluding other social benefits.

Old-age dependency ratio - defined as the ratio between the total number of elderly persons when they are generally economically inactive (aged 65 and above) and the number of persons of working age.[295] It is a sub-indicator of the economic dependency ratio and focuses on a country's public (state) pension system's reliance on the economically active population's pensions (or social security) contributions. It is a useful indicator to show whether a public (Pillar I) pension scheme is under pressure (when the ratio is high, or the number of retirees and the number of workers tend to be proportionate) or relaxed (when the ratio is low, or the number of retirees and the number of workers tend to be disproportionate). For example, a low old-age dependency ratio is 20%, meaning that 5 working people contribute for one retiree's pension.

Open pension funds* – are funds that support at least one plan with no restriction on membership.

Pension assets* – are all forms of investment with a value associated to a pension plan.

Pension fund administrator* – is(are) the individual(s) ultimately responsible for the operation and oversight of the pension fud.

Pension fund governance* – is the operation and oversight of a pension fund. The governing body is responsible for administration, but may employ other specialists, such as actuaries,

[295] See Eurostat definition: http://ec.europa.eu/eurostat/web/products-datasets/product?code=tsdde511.

custodians, consultants, asset managers and advisers to carry out specific operational tasks or to advise the plan administration or governing body.

Pension fund managing company* – is a type of administrator in the form of a company whose exclusive activity is the administration of pension funds.

Pension funds* – the pool of assets forming an independent legal entity that are bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal personality (such as a trust, foundation, or corporate entity) or a legally separated fund without legal personality managed by a dedicated provider (pension fund management company) or other financial institution on behalf of the plan/fund members.

Pension insurance contracts* – are insurance contracts that specify pension plans contributions to an insurance undertaking in exchange for which the pension plan benefits will be paid when the members reach a specified retirement age or on earlier exit of members from the plan. Most countries limit the integration of pension plans only into pension funds, as the financial vehicle of the pension plan. Other countries also consider the pension insurance contract as the financial vehicle for pension plans.

Pension plan* – is a legally binding contract having an explicit retirement objective (or – in order to satisfy tax-related conditions or contract provisions – the benefits cannot be paid at all or without a significant penalty unless the beneficiary is older than a legally defined retirement age). This contract may be part of a broader employment contract, it may be set forth in the plan rules or documents, or it may be required by law. In addition to having an explicit retirement objective, pension plans may offer additional benefits, such as disability, sickness, and survivors' benefits.

Pension plan sponsor* – is an institution (e.g., company, industry/employment association) that designs, negotiates, and normally helps to administer an occupational pension plan for its employees or members.

Pension regulator* – is a governmental authority with competence over the regulation of pension systems.

Pension supervisor* – is a governmental authority with competence over the supervision of pension systems.

Personal pension plans* - Access to these plans does not have to be linked to an employment relationship. The plans are established and administered directly by a pension fund or a financial institution acting as pension provider without any intervention of employers. Individuals independently purchase and select material aspects of the arrangements. The employer may nonetheless make contributions to personal pension plans. Some personal plans may have restricted membership.

Private pension funds* – is a pension fund that is regulated under private sector law.

Private pension plans* – is a pension plan administered by an institution other than general government. Private pension plans may be administered directly by a private sector employer acting as the plan sponsor, a private pension fund or a private sector provider. Private pension plans may complement or substitute for public pension plans. In some countries, these may include plans for public sector workers.

Public pension plans* – are pensions funds that are regulated under public sector law.

Public pension plans* – are the social security and similar statutory programmes administered by the general government (that is central, state, and local governments, as well as other public sector bodies such as social security institutions). Public pension plans have been traditionally PAYG financed, but some OECD countries have partial funding of public pension liabilities or have replaced these plans by private pension plans.

Rate of return* – is the income earned by holding an asset over a specified period.

REIT(s) or Real Estate Investment Trust(s) is the most common acronym and terminology used to designate special purpose investment vehicles (in short, companies) set up to invest and commercialise immovable goods (real estate) or derived assets. Although the term comes from the U.S. legislation, in the E.U. there are many forms of REITs, depending on the country since the REIT regime is not harmonised at E.U. level.

Replacement ratio* – is the ratio of an individual's (or a given population's) (average) pension in a given time period and the (average) income in a given time period.

Service period* – is the length of time an individual has earned rights to a pension benefit.

Single employer pension funds* – are funds that pool the assets of pension plans established by a single sponsor.

Summary Risk Reward Indicator - a measurement developed by the European Securities and Markets Authority (former CESR) to be included in the Key Investor Information Document (KIID) for UCITS (undertakings for collective investment in transferable securities) to reflect the risk profile of a certain fund.

Supervisory board* – is(are) the individual(s) responsible for monitoring the governing body of a pension entity.

System dependency ratio* – typically defined as the ratio of those receiving pension benefits to those accruing pension rights.

TEE system* – is a form of taxation of pension plans whereby contributions are taxed, investment income and capital gains of the pension fund are exempt, and benefits are also exempt from personal income taxation.

Time-Weighted Returns (TWR) - is the standard method of calculating returns (and performance) of an investment and simply represents the growth/decrease in value without incorporating the distorting effects of cash inflows and outflows (for pensions, that means contributions and

Trust* – is a legal scheme, whereby named people (termed trustees) hold property on behalf of other people (termed beneficiaries).

Trustee* – is a legal scheme, whereby named people (termed trustees) hold property on behalf of other people (termed beneficiaries).

UCITS – or Undertakings for Collective Investment in Transferable Securities, is the legal form under E.U. law for mutual investment funds that are open to pool and invest funds from any individual or institutional investor, and are subject to specific authorisation criteria, investment limits and rules. The advantage of UCITS is the general principle of home-state authorisation and mutual recognition that applies to this kind of financial products, meaning that a UCITS fund established and authorised in one E.U. Member State can be freely distributed in any other Member State without any further formalities (also called *E.U. fund passporting*).

Unfunded pension plans* – are plans that are financed directly from contributions from the plan sponsor or provider and/or the plan participant. Unfunded pension plans are said to be paid on a current disbursement method (also known as the pay as you go, PAYG, method). Unfunded plans may still have associated reserves to cover immediate expenses or smooth contributions within given time periods. Most OECD countries do not allow unfunded private pension plans.

Unprotected pension plan* – is a plan (personal pension plan or occupational defined contribution pension plan) where the pension plan/fund itself or the pension provider does not offer any investment return or benefit guarantees or promises covering the whole plan/fund.

Voluntary contribution – is an extra contribution paid in addition to the mandatory contribution a member can pay to the pension fund in order to increase the future pension benefits.

Voluntary occupational pension plans - The establishment of these plans is voluntary for employers (including those in which there is automatic enrolment as part of an employment contract or where the law requires employees to join plans set up on a voluntary basis by their employers). In some countries, employers can on a voluntary basis establish occupational plans that provide benefits that replace at least partly those of the social security system. These plans are classified as voluntary, even though employers must continue sponsoring these plans in order to be exempted (at least partly) from social security contributions.

Voluntary personal pension plans* – Participation in these plans is voluntary for individuals. By law individuals are not obliged to participate in a pension plan. They are not required to make pension contributions to a pension plan. Voluntary personal plans include those plans that individuals must join if they choose to replace part of their social security benefits with those from personal pension plans.

Wage indexation* – is the method with which pension benefits are adjusted taking into account changes in wages.

Waiting period* – is the length of time an individual must be employed by a particular employer before joining the employer's pension scheme.

Winding-up* – is the termination of a pension scheme by either providing (deferred) annuities for all members or by moving all its assets and liabilities into another scheme.

World Bank multi-pillar model – is the recommended design, developed by the World Bank in 1994, for States that had pension systems inadequately equipped to (currently and forthcoming) sustain a post-retirement income stream for future pensioners and alleviate the old-age poverty risk. Simpler, it is a set of guidelines for States to either enact, reform or gather legislation regulating the state pension and other forms of retirement provisions in a form that would allow an increased workers' participation, enhance efficiency for pension savings products and a better allocation of resources under the principle of solidarity between generations.

The standard design of a robust pension system would rely on five pillars:

a) the non-contributory scheme (pillar 0), through which persons who do not have an income or do not earn enough would have insured a minimum pension when reaching the standard retirement age;

b) the public mandatory, Pay-As-You-Go (PAYG) scheme (**Pillar I**), gathering and redistributing pension contributions from the working population to the retirees, while accumulating pension rights (entitlements) for the future retirees;

c) the mandatory funded and (recommended) privately managed scheme (**Pillar II**), where workers' contributions are directed to their own accumulation accounts in privately managed investment products;

d) the voluntary privately managed retirement products (**Pillar III**), composed of pension savings products to which subscription is universal, contributions and investments are deregulated and tax-incentivised;

e) the non-financial alternative aid scheme (pillar IV), through which the state can offer different forms of retirement support – such as housing or family support. Albeit the abovementioned, the report focuses on the "*main pillars*", i.e., Pillar I, II and III, since they are the most significant (and present everywhere) in the countries that have adopted the multi-pillar model.

Definitions with "*" are taken from OECD's Pensions Glossary - http://www.oecd.org/daf/fin/private-pensions/38356329.pdf.

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